State of Alabama
Department of Finance
Division of Purchasing
Master Agreement

Modification

CONTRACT INFORMATION

MASTER AGREEMENT NUMBER: **MA 999 180000000384**

NOT TO EXCEED AMOUNT:

Begin Date:	08/28/2018	Procurement Folder:	625716
Expiration Date:	08/28/2020	Procurement Type:	Master Agreement
Solicitation Number:		Replaces Award Document:	
Award Date:		Replaced by Award Document:	
Modification Date:	07/15/19	Version Number:	2

CONTACT INFORMATION

REQUESTOR:
Patrick Hemme
334-242-7173
Pat.Hemme@purchasing.alabama.gov

ISSUER:
Patrick Hemme
334-242-7173
Pat.Hemme@purchasing.alabama.gov

BUYER:
Patrick Hemme
334-242-7173
Pat.Hemme@purchasing.alabama.gov

CONTRACT DESCRIPTION

MA-BUS CUTAWAY CHASSIS
G49-804042, CUTAWAY CHASSIS

Ship To:

Bill To:

REASON FOR MODIFICATION

VENDOR INFORMATION

Name /Address:

VC000054728: Transportation South Inc

1400 McCain Parkway

Pelham AL 35124

Contact:

Chuck Clark
2057771976
chuckclark@thebuscenter.com

COMMODITY / SERVICE INFORMATION

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
1	0	EA	$49,326.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
17-PASSENGER BUS, H.A.P. / OS-1B
17 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 17-ADULT PASSENGERS (H.A.P. / OS-1B)
6.8L MOTOR

MAKE:_____
MODEL:_____

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
2	0	EA	$56,570.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
17-PASSENGER BUS, H.A.P. / OS-2B
17 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 17-ADULT PASSENGERS (H.A.P. / OS-2B)
6.8L MOTOR

MAKE:_____
MODEL:_____

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
3	0	EA	$58,112.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
17-PASSENGER BUS, ADA/OS-2B
17 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 17-ADULT PASSENGERS (ADA / OS-2B)
6.8L MOTOR

MAKE:_____
MODEL:_____

Final

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
4	0	EA	$50,945.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
17-PASSENGER BUS, H.A.P. / OS-3B
17 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 17-ADULT PASSENGERS (H.A.P. / OS-3B)
6.8L MOTOR

MAKE:_____
MODEL:_____

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
5	0	EA	$54,375.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
17-PASSENGER BUS, H.A.P. / OS-SP
17 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 17-ADULT PASSENGERS (H.A.P. / OS-SP)
6.8L MOTOR

MAKE:_____
MODEL:_____

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
6	0	EA	$51,747.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
21-PASSENGER BUS, H.A.P. / OS-SP

COMMODITY / SERVICE INFORMATION

21 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 21-ADULT PASSENGERS (H.A.P. / OS-SP)
6.8L MOTOR

MAKE:_____
MODEL:_____

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
7	0	EA	$63,013.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
21-PASSENGER BUS, ADA/OS-2B
21 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 21-ADULT PASSENGERS (A/OS-2B)
6.8L MOTOR

MAKE:_____
MODEL:_____

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
8	0	EA	$56,055.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
21-PASSENGER BUS, H.A.P. / OS-2B
21 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 21-ADULT PASSENGERS (H.A.P. / OS-2B)
6.8L MOTOR

MAKE:_____
MODEL:_____

Final

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
9	0	EA	$54,091.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
21-PASSENGER BUS, H.A.P. / OS-3B
21 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 21-ADULT PASSENGERS (H.A.P. / OS-3B)
6.8L MOTOR

MAKE:_____
MODEL:_____

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
10	0	EA	$100.000000	$0.00			$0.00	$0.00

55700 - MASS TRANSPORTATION, TRANSIT BUS ACCESSORIES AND PARTS
PASSENGER DOOR, ELECTRIC DRIVER OPERATED
PASSENGER DOOR, ELECTRIC DRIVER OPERATED

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
11	0	EA	$319.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
DONATION BOX
DONATION BOX:
16 GA METAL, 8" H, 4" W X 6" D
LOCKING INCLUDING 2 KEYS & PADDED STANCHION

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
12	0	EA	$644.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
ENERGY ABSORPTION REAR BUMPER
ENERGY ABSORPTION REAR BUMPER(S)

COMMODITY / SERVICE INFORMATION

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
13	0	EA	$106.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
BATTERY MAINTENANCE SYSTEM
BATTERY MAINTENANCE SYSTEM - POWER PLUS FOR CORROSION.

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
14	0	EA	$420.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
SONAR-STYLE BACK-UP ALARM
SONAR STYLE BACK-UP ALARM:
TO BE MOUNTED IN ADDITION TO THE STANDARD BACK-UP ALARM.

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
15	0	EA	$360.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
VEHICLE LETTERING (5307-5311)
VEHICLE LETTERING: PUBLIC TRANSPORATION ON FRONT/REAR END CAPS, PLUS AGENCY NAME/TELEPHONE ON SIDES. FOR 5307-5311 GRANTEES
ALL LETTERING MUST BE 6 INCHES, CAPITAL LETTERS AND CENTERED.

Final

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
16	0	EA	$360.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
VEHICLE LETTERING (5310)
VEHICLE LETTERING:
AGENCY NAME/TELEPHONE ON SIDES. FOR 5310 GRANTEES.
ALL LETTERING MUST BE 6 INCHES, CAPITAL LETTERS AND CENTERED.

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
17	0	EA	$1,479.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
GRAPHIC DESIGN (TROLLEY LIKE)
GRAPHIC DESIGN: TROLLEY LIKE APPEARANCE

MINIMUM COLORS: BLUE, GREEN, BURGUNDY AND DARK RED.

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
18	0	EA	$430.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
ADVERTISING PACKAGE
ADVERTISING PACKAGE:
EXTERIOR ADVERTISING BRACKETS.
BRACKETS SHALL INCLUDE TWO PERMANENT SIDES AND ONE DETACHABLE SIDE. THE BRACKETS SHALL BE MOUNTED FROM IMMEDIATELY BELOW THE STRIPE & BE THE LARGEST APPROPRIATELY SIZED.

INTERIOR ADVERTISING BRACKETS (ONE ROW BOTH SIDES OF BUS AT WALL/CEILING JOINT)

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
19	0	EA	$447.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
DRIVER POWERED SEAT BASE
DRIVER POWERED SEAT BASE

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
20	0	EA	$670.000000	$0.00			$0.00	$0.00

COMMODITY / SERVICE INFORMATION

55600 - MASS TRANSPORTATION, TRANSIT BUS
CHILD / COMPANION SEAT
INTERGRATED CHILD/COMPANION SEAT

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
21	0	EA	$1,400.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
SURVEILLENCE SYSTEM
SURVEILLENCE SYSTEM:
A) COLOR
B) DIGITAL VIDEO RECORDED (SHALL BE LOCKABLE & TAMPER PROOF)
C) MINIMUM 20 FRAMES PER SECOND
D) 720 X 486 PIXELS NTSC OR EQUAL
E) 3 COLOR CAMERAS, MINIMUM
F) LUX OF 0.1 OR BETTER INFARED LED
G) HOUSING UNIT WITH SECURITY LOCK
H) 24 HOUR RECORD TIME
I) DAY, DATE, TIME IMPRINTS
J) BUILT-IN MICROPHONE
K) OPERATION AUTO ON AT IGNITION AUTO OFF AT IGNITION KILL OR IN 30 SECONDS NO EXTERNAL FLASHING LIGHT
L) HARD DRIVE 30 G MINIMUM WITH BACKUP AND HOT SWAPPABLE
M) POWER 12 V DC SOURCE WITH 16 GA WIRE MINIMUM
N) ABILITY TO DOWNLOAD IMAGES TO PC
O) ABILITY TO PRINT/EMAIL IMAGES PROGRAMMABLE TIMERS
P) 8MM SPLIT SCREEN

Final

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
22	0	EA	$61,391.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
25-PASSENGER BUS, H.A.P. / OS-2B, FLAT FLOOR
25 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 25-ADULT PASSENGERS (H.A.P. / OS-2B)
FLAT FLOOR.

MAKE:_____
MODEL:_____

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
23	0	EA	$64,868.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
25-PASSENGER BUS, ADA/OS-2B
25 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 25-ADULT PASSENGERS (ADA / OS-2B)
6.8L MOTOR

MAKE:_____
MODEL:_____

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
24	0	EA	$59,516.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
25-PASSENGER BUS, H.A.P. / OS-3B
25 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 25-ADULT PASSENGERS (H.A.P. / OS-3B)
6.8L MOTOR

MAKE:_____
MODEL:_____

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
25	0	EA	$61,145.000000	$0.00			$0.00	$0.00

COMMODITY / SERVICE INFORMATION

55600 - MASS TRANSPORTATION, TRANSIT BUS
25-PASSENGER BUS, H.A.P. / OS-SP
25 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 25-ADULT PASSENGERS (H.A.P. / OS-SP)
6.8L MOTOR

MAKE:_____
MODEL:_____

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
26	0	EA	$335.000000	$0.00			$0.00	$0.00

55700 - MASS TRANSPORTATION, TRANSIT BUS ACCESSORIES AND PARTS
ALTRO SAFETY FLOORING
UPGRADE: ALTRO SAFETY FLOORING

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
27	0	EA	$106.000000	$0.00			$0.00	$0.00

55700 - MASS TRANSPORTATION, TRANSIT BUS ACCESSORIES AND PARTS
WIRING KIT FOR TWO-WAY RADIOS
WIRING KIT FOR TWO-WAY RADIOS
(PASSENGER 17,21,25)

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
28	0	EA	$88,917.000000	$0.00			$0.00	$0.00

Final

55600 - MASS TRANSPORTATION, TRANSIT BUS
28-30-PASSENGER BUS, H.A.P OS/SP GASOLINE
28-30 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 28-30-ADULT PASSENGERS (H.A.P OS/SP)
6.8L MOTOR

MAKE:_____
MODEL:_____

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
29	0	EA	$96,560.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
28-30-PASSENGER BUS, H.A.P OS/SP DIESEL
28-30 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 28-30-ADULT PASSENGERS (H.A.P OS/SP)
DIESEL

MAKE:_____
MODEL:_____

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
30	0	EA	$88,806.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
28-30-PASSENGER BUS, H.A.P ADA/OS-2B GASOLINE
28-30 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 28-30-ADULT PASSENGERS (H.A.P ADA OS/2B)
GASOLINE

MAKE:_____
MODEL:_____

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
31	0	EA	$96,467.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
28-30-PASSENGER BUS, H.A.P ADA/OS-2B DIESEL

COMMODITY / SERVICE INFORMATION

28-30 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 28-30-ADULT PASSENGERS (H.A.P ADA OS/2B)
DIESEL

MAKE:_____
MODEL:_____

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
32	0	EA	$83,674.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
28-30-PASSENGER BUS, H.A.P /OS-2B GASOLINE
28-30 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 28-30-ADULT PASSENGERS (H.A.P OS/2B)
GASOLINE

MAKE:_____
MODEL:_____

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
33	0	EA	$91,336.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
28-30-PASSENGER BUS, H.A.P /OS-2B DIESEL
28-30 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 28-30-ADULT PASSENGERS (H.A.P OS/2B)
DIESEL

MAKE:_____
MODEL:_____

Final

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
34	0	EA	$85,521.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
28-30-PASSENGER BUS, H.A.P /OS-4B GASOLINE
28-30 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 28-30-ADULT PASSENGERS (H.A.P OS/4B)
GASOLINE

MAKE:_____
MODEL:_____

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
35	0	EA	$93,183.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
28-30-PASSENGER BUS, H.A.P /OS-4B DIESEL
28-30 PASSENGER CUTAWAY CHASSIS BUS: NEW LATEST MODEL TRANSIT BUS.
APPROXIMATELY 28-30-ADULT PASSENGERS (H.A.P OS/4B)
DIESEL

MAKE:_____
MODEL:_____

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
36	0	EA	$319.000000	$0.00			$0.00	$0.00

55700 - MASS TRANSPORTATION, TRANSIT BUS ACCESSORIES AND PARTS
DONATION BOX
DONATION BOX:
16 GA METAL, 8" H, 4" W X 6" D
LOCKING INCLUDING 2 KEYS & PADDED STANCHION

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total

COMMODITY / SERVICE INFORMATION

37	0	EA	$475.000000	$0.00			$0.00	$0.00

55700 - MASS TRANSPORTATION, TRANSIT BUS ACCESSORIES AND PARTS
ADVERTISING PACKAGE
ADVERTISING PACKAGE:
EXTERIOR ADVERTISING BRACKETS TO INCLUDE: 3 PERMANENT SIDES AND 1 DETACHABLE SIDE, MOUNTED IMMEDIATELY BELOW THE BLUE STRIPE AND BE THE LARGEST APPROPRIATE SIZE.

INTERIOR ADVERTISING BRACKETS: TO INCLUDE ONE ROW ON BOTH SIDE OF BUS AT WALL/CEILING JOINT

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
38	0	EA	$106.000000	$0.00			$0.00	$0.00

55700 - MASS TRANSPORTATION, TRANSIT BUS ACCESSORIES AND PARTS
WIRING KIT FOR TWO-WAY RADIOS
WIRING KIT FOR TWO-WAY RADIOS

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
39	0	EA	$420.000000	$0.00			$0.00	$0.00

55700 - MASS TRANSPORTATION, TRANSIT BUS ACCESSORIES AND PARTS
SONAR BACK-UP ALARM
SONAR BACK-UP ALARM

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
40	0	EA	$420.000000	$0.00			$0.00	$0.00

55700 - MASS TRANSPORTATION, TRANSIT BUS ACCESSORIES AND PARTS
VEHICLE LETTERING "PUBLIC TRANSPORTATION"
VEHICLE LETTERING "PUBLIC TRANSPORTATION"

LETTERING LOCATED ON FRONT/REAR END CAPS PLUS AGENCY NAME/TELEPHONE NUMBER ON BOTH SIDES. LETTERING TO BE 6 INCHES AND CENTERED. (5307-5311 GRANTEES)

Final

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
41	0	EA	$2,520.000000	$0.00			$0.00	$0.00

55700 - MASS TRANSPORTATION, TRANSIT BUS ACCESSORIES AND PARTS
GRAPHIC DESIGN
GRAPHIC DESIGN TO GIVE THE VEHICLE A TROLLEY LIKE APPEARANCE.

MINIMUM COLORS: BLUE, GREEN, BURGUNDY AND DARK RED.

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
42	0	EA	$670.000000	$0.00			$0.00	$0.00

55700 - MASS TRANSPORTATION, TRANSIT BUS ACCESSORIES AND PARTS
INTEGRATED CHILD/COMPANION SEAT
INTEGRATED CHILD / COMPANION SEAT

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
43	0	EA	$1,400.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
SURVEILLENCE SYSTEM

COMMODITY / SERVICE INFORMATION

SURVEILLENCE SYSTEM:
A) COLOR
B) DIGITAL VIDEO RECORDED (SHALL BE LOCKABLE & TAMPER PROOF)
C) MINIMUM 20 FRAMES PER SECOND
D) 720 X 486 PIXELS NTSC OR EQUAL
E) 3 COLOR CAMERAS, MINIMUM
F) LUX OF 0.1 OR BETTER INFARED LED
G) HOUSING UNIT WITH SECURITY LOCK
H) 24 HOUR RECORD TIME
I) DAY, DATE, TIME IMPRINTS
J) BUILT-IN MICROPHONE
K) OPERATION AUTO ON AT IGNITION AUTO OFF AT IGNITION KILL OR IN 30 SECONDS NO EXTERNAL FLASHING LIGHT
L) HARD DRIVE 30 G MINIMUM WITH BACKUP AND HOT SWAPPABLE
M) POWER 12 V DC SOURCE WITH 16 GA WIRE MINIMUM
N) ABILITY TO DOWNLOAD IMAGES TO PC
O) ABILITY TO PRINT/EMAIL IMAGES PROGRAMMABLE TIMERS
P) 8MM SPLIT SCREEN

Line	Quantity	UOM	Unit Price	Service Amount	Service From	Service To	Line Sub Total	Line Total
44	0	EA	$420.000000	$0.00			$0.00	$0.00

55600 - MASS TRANSPORTATION, TRANSIT BUS
VEHICLE LETTERING (5310)
VEHICLE LETTERING: 5310 GRANTEES
ALL LETTERING MUST BE 6 INCHES, CAPITAL LETTERS AND CENTERED.
GRANTEE NAME AND TELEPHONE NUMBER OB BOTH SIDES OF THE BUS

Final

All terms, conditions, and any amendments to solicitation are part of this contract as if fully reproduced herein .

Approved: Michael A. Jones

Purchasing Director

APPROVALS

Date	Status Before	Status After	Approver

Authority:
The Department of Finance Code of Administrative procedure, Chapter 356-4-1 effective September 7, 2012 is incorporated by reference and made a part of this document. To view the Code of Administrative procedures visit our website www.purchasing.alabama.gov.

Choice of Law; Venue:
This Contract will be governed by laws of the State of Alabama and the sole venue for litigation and alternative dispute resolution activities will be the City of Montgomery in the State of Alabama.

Not to Constitute a Debt of the State:
The terms and commitments contained in the RFB, or any contract resulting from this RFB, shall not constitute a debt of the State of Alabama, the incurring of which is prohibited by Section 213 of the Official Recompilation of the Constitution of Alabama, 1901, as amended by Amendment No. 26.

Bid Response Instructions:
In order to submit a responsive bid, bidder must read and follow all instructions, terms, conditions and specifications of this solicitation.

1. Bid envelope(s)/package(s)/box(es) must be identified with the bid number and opening date. Each individual bid must be submitted in a separate envelope. Responses to multiple bid numbers submitted in the same package that are not in separate envelopes and properly identified will be rejected. The Division of Purchasing does not assume responsibility for late bids for any reason including those due to postal or courier service. Bid responses must be in the Division of Purchasing office prior to the "close date and time" indicated on the bid.
2. Bid responses must be in ink or typed on this document, or replicated in the exact format. Signatures must be handwritten originals in ink or the bid will be rejected. Unless indicated in the bid, all price pages must be completed and returned. If an item is not being bid, identify it as N/B (no-bid). Pages should be secured. The Division of Purchasing does not assume responsibility for missing pages. Faxed/emailed bid responses will not be accepted.
3. The unit price always governs regardless of the extended amount. A unit price change on a line must be initialed by the person signing the bid or that line will be rejected. Price changes include but are not limited to cross-out, strike-over, ink-over, white-out, erasure, or any other method changing the price.
4. The Division of Purchasing requires an original and a minimum of one exact copy of the signed, notarized bid to include any required addendum(s) and documentation. The original and the copy should be submitted together as a bid package.
5. An improperly submitted bid, late bid or a bid that is canceled on or before the opening date may be retrieved during normal business hours. These bids will be held for 90 days then destroyed. The Division of Purchasing assumes no responsibility for the document after 90 days. Bids retrieved by vendor(s) are considered withdrawn and vendor(s) relinquishes all rights to protest.

Bid rejection:
Bidders shall not place any qualification, exceptions, conditions, reservations, limitations, or substitutions in their bid concerning the contract terms and conditions. Any such qualifications, exceptions, conditions, reservations, limitations or substitutions shall result in rejection of the bid.

Bids that are improperly submitted or received late will be documented for record but will not be returned nor will bidder be notified.

The following is a partial list whereby a bid response will be rejected:

Bid number not on envelope/package/box
Bid responses with multiple bid numbers in same envelope not properly identified
Bid responses received late
Bid responses not signed/not original signature
Bid responses not notarized/not original signature of notary and/or notary expiration
Bidder notarized own signature
Required information not submitted with bid response
Failure to submit the original bid and a complete exact copy
Bid response received from non-subscribed/expired vendor

Beason-Hammon Alabama taxpayer and Citizen Protection Act (Act 2011-535 and as amended by Act 2012-491)

As a condition for award of this bid, the vendor acknowledges the following:
"By signing this contract, the contracting parties affirm, for the duration of any agreement that they will not violate federal immigration law or knowingly employ, hire for employment, or continue to employ an unauthorized alien within the State of Alabama. Furthermore, a contracting party found to be in violation of this provision shall be deemed in breach of the agreement and shall be responsible for all damages resulting therefrom."

Verification of enrollment in the E-verify program will be required prior to any award to a vendor who employs one or more employees within the State of Alabama. E-verify documentation should be identified with the bid number and the buyer name. Failure to provide documentation within 5 calendar days of notification will result in the rejection of your bid. To enroll in the E-verify program visit www.dhs.gov/e-verify.

Certification Pursuant to Act no. 2006-557

Alabama Law (section 41-4-116, Code of Alabama 1975) provides that every bid submitted and contract executed shall contain a certification that the vendor, contractor, and all of its affiliates that make sales for delivery into Alabama or leases for use in Alabama are registered, collecting, and remitting Alabama state and local sales, use, and/or lease tax on all taxable sales and leases into Alabama. By submitting this bid, the bidder is hereby certifying that they are in full compliance with Act no. 206-557, they are not barred from bidding or entering into a contract pursuant to 41-4-116, and acknowledges that the awarding authority may declare the contract void if the certification is false.

Information and assistance to minority and women-owned businesses in acquiring M/WBE certification may be obtained from the office of minority business enterprises at www.adeca.alabama.gov

In compliance with Act 2016-312, by submitting this bid the contractor hereby certifies that it is not currently engaged in, and will not engage in, the boycott of a person or an entity based in or doing business with a jurisdiction with which this state can enjoy open trade.

******************STANDARD TERMS and CONDITIONS ****************

Vendor Registration and Subscription Fee
Vendors may receive bid notices by registering at the State of Alabama vendor self-service (VSS) portal, https://procurement.staars.alabama.gov. Vendors wishing to respond to bids must be subscribed. Bid responses will not be accepted from non-subscribed vendors. Once registered you may subscribe by clicking the "pay subscription fee" tab at the top of the VSS home page. Payments must be made by credit or debit card. Vendors should provide their VSS assigned vendor number on all bid responses. A vendor's subscription must be maintained throughout the term of an awarded contract, to include renewal periods.

Non-appropriation of funds
Continuation of any agreement between the State and a bidder beyond a fiscal year is contingent upon continued legislative appropriation of funds for the purpose of this bid and any resulting agreement. Non-availability of funds at any time shall cause any agreement to become void and unenforceable and no liquidated damages shall accrue to the state as a result. The State will not incur liability beyond the payment of accrued agreement payment.

Proration
Any provision of a contract resulting from this bid to the contrary notwithstanding, in the event of failure of the State to make payment hereunder as a result of partial unavailability, at the time such payment is due, of such sufficient revenues of the State to make such payment (proration of appropriated funds for the State having been declared by the governor pursuant to Section 41-4-90 of the Code of Alabama 1975), the contractor shall have the option, in addition to the other remedies of the contract, of renegotiating the contract (extending or changing payment terms or amounts) or terminating the contract.

Intent to Award
The State of Alabama – Division of Purchasing will issue an 'Intent to Award' before a final award is made. The 'Intent to Award' will continue for a period of five (5) calendar days, after which the award will be final provided there are no protests. Upon final award, all rights to protest are forfeited. A detailed explanation of this process may be reviewed in the Alabama Administrative Code – Chapter 355-4-1(14). All protest communications filed via email must be sent to protests@purchasing.alabama.gov

Alternate Bid Response
Unless stated elsewhere in this Invitation-to-Bid (ITB) the State of Alabama will accept and evaluate alternate bid submittals on any ITB's provided the response meets all bid requirements.

Internet Website Link's
Internet and/or website links will not be accepted in bid responses as a means to supply any requirements stated in this (Invitation-to-Bid) ITB.

Product Delivery, Receiving and Acceptance
In accordance with the Universal Commerce Code (Code of Alabama, Title 7), after delivery, the State of Alabama has the right to inspect all products before accepting. The State will inspect products in a reasonable timeframe. Signature on a delivery document does not constitute acceptance by the State. The State will accept products only after satisfactory inspection.

Sales Tax Exemption
Pursuant to the Code of Alabama, 1975, Title 40-23-4 (A)(11), the State of Alabama is exempt from paying sales tax. An exemption letter will be furnished upon request.

Invoices
Inquiries concerning invoice payments are to be directed to the receiving agency.

Bid Reponses and Bid Results
Unevaluated Bid Responses are available on our website at www.purchasing.alabama.gov. The complete bid file will be made available for review in the Division of Purchasing by scheduling an appointment. We do not provide copies of bid files.

Foreign Corporation – Certificate of Authority
Alabama Law provides that a foreign corporation (an out-of-state company/firm) may not transact business in the State of Alabama until it obtains a Certificate of Authority from the Secretary of State. Section 10-2B15.01, Code of Alabama 1975. To obtain forms for a Certificate of Authority, contact the Secretary of State, Corporations Division, (334) 242-5324. The Certificate of Authority does not prevent the vendor from submitting a bid.

Alabama Preferred Vendor
A "Preferred Vendor" shall be a person, firm, or corporation that is granted preference priority by meeting all of the following criteria as established by the Code of Alabama Section 41-16-20.
Priority 1. Produces or manufacturers the product within the State.
Priority 2. Has an assembly plant or distribution facility for the product within the State.
Priority 3. Is organized for business under the applicable laws of the State as a corporation, partnership, or professional association and has maintained at least one retail outlet or service center for the product or service within the State for not less than one year prior to the deadline date for the competitive bid.

Preferred vendor status must be indicated on the pricing page(s) of your bid response in order to be considered for preferred vendor preference. By signing this bid, you affirm that the item(s) indicated meet all three criteria of a preferred vendor.

Bid item(s) meeting the criteria of preferred vendor where pricing is within 1% of the lowest compliant bid may be considered for award by the awarding authority.

PURPOSE:

THE PURPOSE OF THIS RFB IS TO ESTABLISH A STATWIDE CONTRACT TO PURCHASE CUTAWAY BUS CHASSIS FOR STATE AGENCIES.

CONTRACT PRICES ARE AVAILABLE TO ALL LOCAL GOVERNMENTAL AGENCIES AND SCHOOLS.

AWARD:
THE AWARD SHALL BE MADE BY COMMODITY GROUPING TO THE LOWEST RESPONSIBLE BIDDER MEETING ALL SPECIFICATIONS OF THE COMMODITY GROUPING.

WE WILL USE THE FOLLOWING CRITERIA TO DETERMINE THE LOWEST BIDDER:
THE SUM OF ALL LINES IN EACH COMMODITY GROUPING (GROUP 1 - 17, 21 AND 25 PASSENGER) AND (GROUP 2 - 28 AND 30 PASSENGER).

MANDATORY PRE-BID CONFERENCE:
There will be a mandatory pre-bid conference for all vendors bidding on this RFB. Vendors will be required to sign in at the mandatory pre-bid conference. **Only those vendors that are signed in for the pre-bid conference will be allowed to bid on this RFB**. Vendors attending the pre-bid conference should come prepared to ask questions relative to this RFB.

Mandatory Pre-bid Conference will be held:

DATE: Friday, July 13, 2018
TIME: 10:00 am
LOCATION:
Division of Purchasing
RSA Union Building
100 N. Union Street, Suite 192
Montgomery, AL 36104

BIDDERS CERTIFICATION:

THE ATTACHED BIDDERS CERTIFICATION MUST BE SIGNED, DATED AND SUBMITTED ALONG WITH THE RFB. PLEASE ATTACH AN EXACT COPY TO YOUR EXACT COPY OF THE RFB.

MAKE AND MODEL:

YOU **MUST** LIST THE MAKE AND MODEL ON THE COMMODITY LINES ASKING FOR THAT INFORMATION. FAILURE TO DO SO WILL RESULT IN A REJECTED BID.

FREIGHT:
BID IS F.O.B. DESTINATION. ANY FREIGHT CHARGES MUST BE INCLUDED IN THE BID PRICES.

DELIVERY TIME FRAME:
ALL ITEMS ORDERED MUST BE DELIVERED TO THE "SHIP TO" ADDRESS SHOWN ON THE P.O. WITHIN ONE HUNDRED TWENTY (120) DAYS OF VENDORS RECEIPT OF ORDER.

CONTRACT PERIOD:

ESTABLISH A 12 MONTH CONTRACT WITH AN OPTION TO EXTEND FOR A SECOND, THIRD, FOURTH, AND FIFTH 12 MONTH PERIOD WITH THE SAME PRICING, TERMS AND CONDITIONS. THE SECOND, THIRD, FOURTH, OR FIFTH 12 MONTH PERIOD, IF AGREED BY BOTH PARTIES, WOULD BEGIN THE

DAY AFTER THE FIRST, SECOND, THIRD, OR FOURTH 12 MONTH PERIOD EXPIRES. ANY SUCCESSIVE EXTENSION MUST HAVE WRITTEN APPROVAL OF BOTH THE STATE AND VENDOR.

PRICING:
FEDERALLY MANDATED CHANGES WHICH RESULT IN AN ADDITIONAL COST TO THE VENDOR MAY BE SUBMITTED TO STATE PURCHASING FOR APPROVAL TO INCREASE THE CONTRACT PRICE. IT IS THE VENDOR'S RESPONSIBILITY TO NOTIFY STATE PURCHASING AND PROVIDE ADEQUATE DOCUMENTATION TO EXPLAIN THE CHANGE. AWARDED VENDORS MAY, AT RENEWAL TIME, REQUEST AN ESCALATION INCREASE OF NO MORE THAN 5%. THE REQUEST FOR AN INCREASE MUST BE SUBMITTED TO STATE PURCHASING AT THE TIME OF RENEWAL AND MUST BE ACCOMPANIED BY SUPPORTING DOCUMENTATION OF PRICE INCREASES. THE BURDEN IN REQUESTING THE INCREASE AND PROVIDING ADEQUATE DOCUMENTATION RESTS SOLELY WITH THE AWARDED VENDOR.

PLEASE NOTE: THE EXACT BID COPY REQUIREMENT PER ITEM NUMBER 4 UNDER AUTHORITY OF THIS RFB. PLEASE NOTE: FAILURE TO PROVIDE THE REQUIRED COPY WITH YOUR BID WILL RESULT IN THE REJECTION OF YOUR BID.

PLEASE NOTE: ALL PRICES MUST BE GIVEN PER THE UNIT OF MEASURE IN THE UNIT PRICE SPACE OF THE RFB DOCUMENT. FAILURE TO PROVIDE THE UNIT PRICE AS OUTLINED ABOVE WILL RESULT IN THE REJECTION OF YOUR BID.

ALABAMA DEPARTMENT OF TRANSPORTATION SPECIFICATION TEXT

Bid Item: CUTAWAY CHASSIS BUS: new latest model Transit Bus, Approximately 17, 21, 25 Adult passengers (METAL BODY) Gasoline/ State Purchasing Ref. No. T-903

The Alabama Department of Transportation (ALDOT) is soliciting bids for the vehicle designated as the bid item. These specifications are intended to provide the basic requirements for the vehicle described. It is not the intent of the specifications to restrict bids for any vehicle that will comply with the design features and functions described herein. These specifications are intended to meet the basic needs of the transit providers and insure the safety of the passengers.

The bids received must be based on the equipment and appurtenances described. Any variation proposed from the equipment and appurtenances must be equal to or better than the equipment shown in the specifications. ALDOT will make the final determination regarding the quality and cost of any alternatives proposed.

Each vehicle submitted by the successful bidder must meet, or exceed all of the specifications contained in this "invitation to bid" and must meet the requirements of the Americans with Disabilities Act, 49CFR, Part 38, Subpart B — Buses, Vans and Systems.

At the request of ALDOT, the manufacturer shall present test reports and/or certifications which substantiate the vehicle being offered complies with all Federal Motor Vehicle Safety Standards (FMVSS) and Environmental Protective Agency (EPA) emission standards.

The manufacturer shall provide at time of delivery of first bus a certified copy of full report indicating the vehicle meets all safety requirements based on tests performed at the Altoona Bus Testing Center.

Bidder must provide documentation to substantiate any bid item requiring "equal" or " equal to" justification. ALDOT will make the final determination in this regard.

17 Passenger (158 inch Wheelbase minimum)

Seating Capacity Approximately 17
Overall Length Maximum – 280 inches
Overall Width Maximum – 98 inches
Overall Height Maximum – 122 inches
Interior Width Minimum – 90 inches
Interior Height Minimum – 75 inches
First Step Height Maximum – 12.5 inches (10 inches Pref.)
Step Riser Height Maximum – 10 inches
Step Tread Depth Minimum – 8.5 inches
Floor Height Maximum – 38.5 inches
Seat Width Minimum – 17.5 inches
Seat Spacing Minimum – 27 inches
Aisle Width Minimum – 16 inches
Entry Door Minimum – 28 x 80 inches
Gross Vehicle Weight Rating Minimum – 14,200 pounds
Wheelbase 158 inches (minimum)
Fuel Tank Capacity Minimum 55 gallons

SEATING FLOOR PLAN BID OPTIONS:

1. FLOOR PLAN OPTION XV (Gasoline – HAP OS/1B) Flat Floor
2. FLOOR PLAN OPTION XVI (Gasoline – HAP OS/2B) Flat Floor
3. FLOOR PLAN OPTION XVII (Gasoline – HAP OS/3B) Flat Floor
4. FLOOR PLAN OPTION XVIII (Gasoline – HAP OS/SP) Flat Floor
5. FLOOR PLAN OPTION XIX (Gasoline – HAP ADA-OS/2B) Flat Floor

21 Passenger (158 inch Wheelbase minimum)

Seating Capacity Approximately 21
Overall Length Maximum – 285 inches
Overall Width Maximum – 98 inches
Overall Height Maximum – 122 inches
Interior Width Minimum – 90 inches
Interior Height Minimum – 75 inches
First Step Height Maximum – 12 ½ inches (10 inches preferred)
Step Riser Height Maximum – 10 inches
Step Tread Depth Minimum – 8.5 inches
Floor Height Maximum – 38 ½ inches
Seat Width Minimum – 17 ½ inches
Seat Spacing Minimum – 27 inches
Aisle Width Minimum – 16 inches
Entry Door Minimum – 28 x 80 inches
Gross Vehicle Weight Rating Minimum – 14,200 pounds
Wheelbase 158 inches (minimum)
Fuel Tank Capacity Minimum 55 gallons

1. FLOOR PLAN OPTION XVI (Gasoline – HAP OS/2B) Flat Floor
2. FLOOR PLAN OPTION XVII (Gasoline – HAP OS/3B) Flat Floor
3. FLOOR PLAN OPTION XVIII (Gasoline – HAP OS/SP) Flat Floor
4. FLOOR PLAN OPTION XIX (Gasoline – HAP ADA-OS/2B) Flat Floor

25 Passenger (212 inch Wheelbase maximum)

Seating Capacity Approximately 25
Overall Length Maximum – 335 inches
Overall Width Maximum – 98 inches
Overall Height Maximum – 122 inches
Interior Width Minimum – 90 inches
Interior Height Minimum – 75 inches
First Step Height Maximum – 12 ½ inches (10 inches preferred)
Step Riser Height Maximum – 10 inches
Step Tread Depth Minimum – 8.5 inches
Floor Height Maximum – 38 ½ inches
Seat Width Minimum – 17 ½ inches
Seat Spacing Minimum – 27 inches
Aisle Width Minimum – 16 inches
Entry Door Minimum – 28 x 80 inches
Gross Vehicle Weight Rating Minimum – 14,200 pounds
Wheelbase 212 inches (maximum)
Fuel Tank Capacity Minimum 55 gallons

1. FLOOR PLAN OPTION XVI (Gasoline – HAP OS/2B) Flat Floor
2. FLOOR PLAN OPTION XVII (Gasoline – HAP OS/3B) Flat Floor
3. FLOOR PLAN OPTION XVIII (Gasoline – HAP OS/SP) Flat Floor
4. FLOOR PLAN OPTION XIX (Gasoline – HAP ADA-OS/2B) Flat Floor

BASIC SPECIFICATIONS

Engine:

The engine will be a minimum OEM 6.8-liter Gasoline V10 (Ford) or 6.0 V8 (GM) Engine. Shall have electronic fuel injection.

Chassis:

Front Axle 4,600 lbs. minimum. Rear Axle 9,450lbs. minimum. Wide track axle desired for ride stability.

Wheelbase:

158” Minimum

GVWR:

14,200 lbs. min. original equipment manufacturer's rating.

Battery:

Dual heavy duty 12-volt, minimum 1,300 CCA, in readily accessible location. Second battery on frame rail is to be on a skirt mounted slide tray with lockable door. The battery tray shall be treated for resistance to corrosion and shall be supported on a ball bearing slide mechanism. The battery access door shall be lockable and located in the skirt area on a slide tray. A battery door hold open device shall be installed for service. A Battery disconnect switch shall be in an area easily accessible by the driver in a seated position.

Alternator:

Heavy duty, 225 AMP minimum with internal voltage regulator.

Fuel System:

55-gallon minimum. The fuel system will be designed to prevent fumes from escaping into passenger compartment. The tank shall be located behind rear axle and between frame rails for efficient weight distribution. The filler pipe or neck hall be free of any obstructions and meet industry standards. The fuel system shall be internally baffled to prevent surging and an engine mounted fuel filter with replaceable type elements. If dual tanks are provided they must be refueled through a single filler neck/opening on the vehicle. If dual tanks are provided, there must be no action required by the driver to switch between tanks. The fuel system must meet federal standards.

Transmission:

Transmission shall have (5) speed automatic minimum with overdrive. It shall also have an external heavy-duty transmission cooler with capacity to match GVW of vehicle. Shift lever

to be interlocked with starting motor to prevent engaging of starter in any gear position other than neutral or park.

Brakes:

Bus must be equipped with both service and parking brakes that comply with FMVSS #105.

Service brakes: The service brakes shall be capable of stopping the vehicle from a speed of twenty (20) mph with a seated load of one-hundred-fifty (150) pounds per passenger at a rate of deceleration equivalent to a stop within twenty-two (22) feet. Brakes shall be OEM Anti-lock brake system (ABS), hydraulic power assist with hydraulic disc brakes and be adequate to the GVWR of the vehicle. Parking brake – The parking brake shall be capable of holding a fully loaded vehicle on a 20% grade. The system shall incorporate a warning light on the instrument panel to indicate to the driver when the brake is applied. The controls for the wheel chair ramp shall be inter locked. The vehicle cannot be moved when the ramp is not stowed and so the ramp cannot be deployed unless the interlocks are engaged. The interlock must meet ADA Title 49 Lift Interlock requirements.

Steering:

Chassis shall have OEM cruise control. Steering wheel/column shall be tilting for operator comfort and safety. Standard OEM power steering is required.

Exhaust System:

Street side exhaust system will be standard. The exhaust system must be leak proof and designed and constructed to minimize fire hazard. All parts must be made of corrosion resistant materials. Flexible tubing may not be used in the exhaust system.

Exhaust tail pipe shall be installed as high as possible from the ground. Exhaust gases or waste heat shall be discharged to the rear of the bus. System shall be securely fastened and routed to protect components from hazards. System shall conform to the requirements of Federal Motor Carrier safety regulations.

Exhaust shall be securely attached to the chassis frame. Galvanized heat shielding shall run between the exhaust and the floor of the vehicle. This shield at a minimum shall meet OEM up-fitter guide requirements.

Lubrication:

Full and complete lubrication as furnished in regular commercial production units shall be provided. High-pressure hydraulic fittings shall be provided where needed. Fittings shall be located to permit ease of access.

All exposed lubrication fittings shall be masked or otherwise protected at the time of painting in order to keep them free from paint and undercoating.

Sun Visor:

Manufacturer’s standard sun visor shall be provided, adjustable for the windshield in front of the driver and for the driver window.

Lettering:
The lettering shall be placed on both sides of the bus. All lettering must be 6", capital letters, and centered. The lettering will be a permanent adhesive vinyl applied in a professional manner by the dealer.

Hood:
The lock release shall be located inside the vehicle, easily accessible to the driver. If tilt design, hood must have some form of external locking device.

Wheels & Tires:
Tires shall be transit-type 225/75R-16 steel belted radial minimum or equal. A spare tire and wheel of the same size, type, and quality is to be included and mounted under the vehicle if possible. There shall be single wheels on the front and dual wheels on the rear. Wheels and tires to meet minimum GVWR. All rims are to be painted the same color as the bus. Mud flaps shall be provided behind both sets of rear wheels.

Suspension:
Heavy-duty OEM suspension front and rear required. Heavy-duty springs (front 4,600 lb. minimum capacity, rear 9,450 lb. minimum capacity) and shock absorbers. Heavy-duty front and rear stabilizer bar if available. Direct-acting double action piston type shock absorbers. Suspension is to be matched to GVWR of vehicle. Successful bidder shall furnish on request full certification along with supporting documentation on ability to meet the said specifications and shall indicate certified curb weight and GVW rating based on axles, suspension system, shock absorbers, and tires. All chassis are to be equipped with eccentric Castor/camber pinch bolt bushing kits to insure proper front-end alignment after body mounting. Front end alignment will be required of the manufacturer after the bus is completed and prior to delivery to the customer. A report printed after the alignment has been complete shall be provided with the delivered vehicle.

Windows:
Passenger windows shall be top T-slide panel type AS3 certified transit grade. All side windows which open will be designed to prohibit sliding on sudden stops and prevent rattling. Window seal rubber must be of such quality as to resist vulcanizing to either sash or sills.

All windows, including emergency exit windows, shall comply with the FMVSS 217.

There shall be at least one emergency exit window on each side of the bus and one in the rear with the locations indicated by a red LED light mounted above each emergency exit window. These shall have detailed operating instructions. All emergency windows shall be equipped with an audible warning device activated when window is unlatched.

Driver's side window will be glazed OEM chassis safety plate glass and be easily adjustable with a one-hand operation. Passenger windows are to be tinted to single density approximately 30% light transmission with bronze or gray. Glazing on all windows must comply with FMVSS 571.205.

A molding(s) will be provided above side windows of the vehicle to prevent rain from falling or blowing directly into window on passengers.

The rear window shall have a Fresnel or wide-angle lens attached. Minimum is 10 inches x 13 inches. The rear window shall be an emergency egress type minimum 30 inches x 48 inches. Additional window(s) may be added to attain not less than 1200 square inches.

Visibility window between passenger entrance door and right front tire of sufficient size to assist driver in judging distance to curb and passenger entry.

Lighting:

Exterior-All exterior lights shall be LED (Light Emitting Diode). There shall be additional round 7-inch lights, 2-amber front, and 2 red rear, to be activated by service brake, but must also flash when passenger and/or wheelchair lift door is open. These lights may be recessed. Mid-body turn indicators are also required. All exterior clearance lights must be armored or recessed. All clearance, marker, and tail light assemblies including back-up lights shall be LED type. Tail light assemblies shall consist of red, white, and amber lens.

Exterior lighting shall include:

Sealed beam headlights with high and low beam.
Front and rear directional signals, operated by a lever on the left side of the steering column and of the self-canceling type. These signals shall operate independently from the brake lights.
Two white or clear backup lights in the rear of the vehicle automatically engaging with the transmission in reverse.
Rear mounted red combination stop/tail lights, and a rear safety stop light shall be mounted in rear window area.
single white rear license plate light.
Front and rear clearance lights.
A minimum of six (6) reflectors; two (2) red on rear and two (2) on each side, amber front and red rear.
Front and rear identification markers, amber front and red rear.
All marker and clearance lights shall have armor, recessed, or protected material. A switch shall be provided to operate all directional signals simultaneously as an emergency warning signal.

Interior lighting:

The instrument panel will be indirectly lighted. A minimum of one (1) overhead passenger entry light and two (2) stepwell lights (one on each side of stepwell). These lights shall illuminate automatically when door is opened. Other stepwells and doorways in which lifts are installed, shall have at all times at least 2-foot candles of illumination measured on the step tread or lift when deployed at the vehicle floor level. A minimum of two (2) passenger area overhead dome lights; one (1) in the front and one (1) in the rear of the body shall be mounted to the ceiling and illuminated when door is opened. Power on/off override shall be available to the driver for the overhead dome lights. All interior lights shall be mounted to the ceiling, underside of overhead racks, or sidewalls (storage compartments are not acceptable for mounting). All

interior lights shall be LED. Lift equipped vehicles shall have an overhead dome lamp at the lift area. Interior lighting must also include red indicator led lights above each emergency window.

All interior materials will meet or exceed the flame spread requirements of FMVSS 302.

Seats:
The driver's seat shall be transportation quality with retractable seat belt and a full range of adjustments fore and aft, high back, and with flip up arm rests.

Seat cushion and back will have spring supports and foam padding and be upholstered in transit-grade vinyl #686 Newport Ash Gray or approved equal. Seat frame and pedestal are to be covered in black paint. All standard passenger seats shall be installed with "T-Legs into wall and floor seat track. The seat track must be welded to the steel structure of the sidewalls and the floor. All seats shall be easily adjustable and removable from interior of the vehicle. Seats are to be consistent with standard transit quality construction. School bus type seats are not acceptable. Seat frames are to be constructed of heavy duty 1” diameter, 16 ga. steel tubing. All seat frames are to be welded. All seats shall provide a minimum width of 17” per passenger, or 35” per two-passenger bench. Seat backs are to be 34” in height measured from floor to the top of the back of the seat. Back row of seats may be 16”. Seat spacing shall have 27” to 29” of hip-to-knee room.

All passenger seats shall be Freedman Featherlite double mid-back seats or equal with aisle-side arm type fold-up arm rests and aisle grab handles. Seat material shall be premium transit grade vinyl upholstery.

Adjustable, fully retractable 60” adult size seat belts shall be provided for each passenger seat. Vendor will provide four (4) seat belt extensions/extenders per vehicle for use by over-sized passengers. These will be stored in a separate and permanently mounted storage bag located in the driver’s area of the vehicle. All seats shall be installed with 5 nuts and bolts.

Air Condition/Ventilation:
The bidder shall offer both “Trans Air or ACC Climate Control (or an approve equal)” rear air conditioning systems. A complete air-conditioning system will be of a size capable of providing adequate cooling and dehumidifying capacity for driver and passenger comfort.

All vehicles require an OEM integral front air conditioner system and auxiliary rear air conditioning system.

The system must be capable of maintaining 75 degrees F. interior temperature with a full load of passengers, with an ambient temperature of 95 degrees F. and 60 % relative humidity. There will be a free blow system to evenly distribute cool air for passengers and operator comfort.

Bidder will furnish complete details of the air-conditioning system proposed for this vehicle, including warranty and service provisions and air-conditioning service vendors in the State of

Alabama. The air-conditioning will be a minimum of 68,000 BTUs, not including OEM dash air. The system will consist of a heavy-duty skirt mounted condenser that utilizes 3 fan motors with fan guards. A condenser with two fans is acceptable with 14 inch fans and fan guards. The condenser must be flush with, and not hang below the body skirt. The filter drier (16 CI.) will be mounted for ease of service. The accumulator will also include an oil pick up tube to insure proper oil return to the compressors. Evaporator will have 2 or more blowers that will produce sufficient pressure to insure proper air volume to be distributed in the vehicle cabin area.

Air conditioning warranty shall be two (2) years minimum with unlimited mileage.

Evaporator blower must be equipped with 3 fan speeds. Also, removable and washable return air filters will be supplied to provide cleaner air distribution. The air conditioning system is also required to have high and low-pressure switches to protect the air conditioning compressor from extreme Freon discharge and suction pressures that may occur during severe operating conditions. Skirt mounted condensers shall have an auxiliary mud flap mounted forward and rearward of the condenser to protect the condenser fans and coolant hoses from debris. The rear system must have dual compressors and a rheostat control. A driver’s windshield fan shall be provided in the driver’s area capable of providing forced air circulation to the driver. The fan shall be operated with an on-off switch.

Heating/Defrosting System:
The heating system will consist of at least two (2) units, one front unit located in the driver's area and one unit so located as to uniformly heat the bus. The front unit will have one large heater core and two heavy duty blowers to provide sufficient heated air for defrosting of the windshield and for bus heat. The blower motors will be controlled by a three-position switch on the driver's control panel. An additional outlet will be provided near the driver to allow heated air to the driver's area. A lever or knob will control the distribution of heated air between the defroster plenum chamber and the bus heating outlet. The control will be located conveniently for the driver. The bus heating unit will be located per manufacturer's recommendations so as to provide 65-degree F. inside temperature (evenly distributed) at 0 degrees F. ambient temperature. The inside temperature

will be with an empty bus. Circulation blowers will be controlled by a three-position switch on the driver's control panel, having "off', "high", and "low" positions. Combustion type heaters shall not be permitted. The manufacturer shall add the required amount of all-weather coolant after heaters have been connected to protect the cooling system to -25 degrees F. tested at normal engine temperature. Windshield defrosters and 6-inch fan to be mounted in driver area for increased circulation. Rear heater capacity to be 65,000 BTU minimum. Bus is to have ventilation by driver's feet and in front of passenger door for driver and passenger comfort in summer. All heater and air-conditioning lines and hoses to be sufficiently protected and insulated to insure against wear from friction and the elements (interior routing if possible).

The system shall incorporate an easily accessible water cut off ball valve installed underneath bus at driver’s door to allow water flow to rear heater to be shut off in summer.

Interior Paneling:

All interior panels will be vinyl-clad aluminum or otherwise covered with a maintained material. A metal school bus interior is not acceptable. Panels shall be installed such that no warping of interior materials occurs. Interior panels shall be of a smooth surface to allow easy cleaning. Interior panels, materials and treatments shall be flame retardant meeting FMVSS #571-302 and treated to be cleaned. Color is to be an off-white or a light gray.

Flooring:
The floor structure shall consist of fully jig welded steel members. Crossmembers fabricated to a “G” shape or box tube are acceptable. Additional structure is added where required to provide mounting structure for L Track stanchion mounting, etc. The floor will be constructed of minimum 3/4-inch-thick marine grade plywood with a steel or aluminum underbelly securely fastened to the cross sills. All plywood edges are to be properly sealed for moisture. Plywood is to be sanded and filled where needed to create a smooth surface to lay the floor material. The floor surface shall be covered with wall to wall slip resistant minimum 2.2 mm Gerfloor Sirius NT, Altro Transflor Meta or approved equivalent. All step edges shall have a band of bright yellow or white running the full width of each step. The flooring shall be securely bonded to the subfloor and steps with an adhesive backed by a bus manufactures warranty of no less than 5 years for installation and adhesion. All edges shall be sealed to prevent water penetration and all seams shall be heat welded to prevent penetration of water into the subfloor. The floor must be installed according to manufacturer’s directions.

A white standee line will be provided across the aisle at the rear of the driver's seat. Also, the flooring shall include a fuel sender plate located in the aisle above the fuel tank for sending unit repairs. The fuel sender plate shall not be less than 12 inches x 12 inches and be of "Diamond-plate" material. Such plating must be installed so as to be flush with passenger area flooring. Floor area designated for wheel-chair occupancy will be free of obstacles (i.e.- heater).

Doors:
The vehicle shall be equipped with a front entrance door, Bi-folding, or two outward opening doors built of the vehicle opposite the driver. The door may be outward on a 1” tubular steel frame or equal strength aluminum with a full exterior facing of tinted safety glass. The door will have a minimum clear opening width of 28-32 inches with a full height of 80 inches and be easily opened manually. Door may be standard transit-type or full glass. All doors shall be equipped with a locking device when closed. Door will be of a type to provide optimum seal. There will be a soft rubber cushion at least 2 inches in width on the meeting edges. A high-textured, padded non-slip assist rail is to be mounted on both sides of stairwell. Doors, door wells, and seals are to be constructed to prevent drafts and entry of water to the extent practical. Doors and door openings will comply with current federal regulations. A rain molding shall extend over the door frame to prevent water intrusion.
A padded modesty panel with passenger assist stanchion will be located to the left of the passenger entry door. The panel will be attached to vehicle wall and extend only to a point where it will not interfere with the aisle. A driver-side running board 12 inches minimum width must be of sufficient strength to prevent deflection. Not less than 7 inches shall extend beyond driver door to ensure footing. The running board must be designed to hold 300 pounds without permanently changing shape, and be slip resistant punched aluminum, or equivalent metal

running board and have a yellow reflective safety edging that is a minimum of 4 inches in width. Diamond plate is not considered slip resistant.
Wheelchair Lift Door:
The wheelchair lift door location shall have one option: I) be located on the right or curbside of vehicle and between the rear wheel and rear of the bus. The wheelchair lift door shall be a Dual Leaf type and hinged opening outward against bus body.

The lift door shall provide 68 inches minimum of walk-in headroom as measured when lift is in full raised usable position. The lift door shall have 43 inches minimum clear opening width. The lift door shall be such as not to protrude more than 2 – 4 inches past the side of the bus body. A door flush with bus body is preferred. The door shall have an exterior locking handle. The door shall have glazed windows which will provide an appearance similar to that of the rest of the vehicle and meets all applicable FMVSS. Lift door opening will include a rain gutter.

The door will have a permanently mounted latch that will hold the door in the open position with less than 1" of movement. The edge of the lift door shall have a roll-stop device as part of the lift platform. A positive factory installment gas shock installed at top of door to assist in maintaining opened or closed position of door(s) and shall be installed to hold the lift entry doors open while the lift is in use. Design of lift door and hold-open devices shall be submitted with the bid. The wheelchair lift door shall meet all federal ADA regulations. Also, a light which meets ADA requirements is to be mounted inside the vehicle approximately over the lift door capable of lighting the lift platform as well as the immediate surrounding area.
The lift door shall display an appropriate handicap decal not less than 6 inches x 6 inches in size. A gull-wing type door is not acceptable.

Wheelchair Lift:
Specifications for the wheelchair lift are attached and are a part of these general specifications.

Wheelchair Securement Stations:
Specifications for the wheelchair securement stations are attached and are a part of these general specifications.

Color: Manufacturer's standard bright white exterior. Striping is also required and is to run the approximate length of the vehicle on both sides and be 8 inches in width. Stripe to be 1 inch below passenger windows. Striping will be blue, green, burgundy, peacock blue or purple. Stripe color will be noted at time of order. All colors will be approved by ALDOT prior to award of bid. Striping may be paint or vinyl graphics material.

Stanchions and Grab Rails:
All grab rails and stanchions shall be not less than 1 ¼ inches outside diameter stainless steel tubing. A heavy pre-molded, energy-absorbing padding shall be glued or otherwise bonded without screws to prevent twisting/slipping to all grab rails and stanchions. All grab rails and stanchions shall be padded with BenTech Seamless Series high textured safety tubing or equal. Fittings shall be stainless steel, cast aluminum or equal, corrosion resistant material with anti-rattle fittings. Grab rails on both sides of passenger entrance will be positioned so passengers will not use door-opening device for support when boarding or de-boarding the vehicle.

A heavy-duty modesty padded panel on both sides will be provided to the left of the passenger entry door with a floor-to-ceiling stanchion provided at the aisle. A horizontal hand rail should extend from the stanchion to the body side wall.

All guard rails and stanchion mountings will have reinforcement plates welded to structure behind panels of sufficient strength to withstand passenger force. Final locations shall be provided by diagram/floor plan and/or pilot model inspection. All sharp edges, protruding fasteners, brackets, etc., that can cause injury or damage to clothing must be eliminated. All stanchions and grab rails are to be attached to structural posts or cross members of the roof to insure maximum strength.

Windshield Wiper/Washer:
Two heavy-duty, self-parking, electrically operated with
intermittent pulse windshield wipers shall be furnished. Windshield washers with a minimum one (1) gallon reservoir shall be provided. The system will be located for easy inspection, maintenance, filling and removal.

Mirrors:
Remote, fully adjustable, heated and shall consist of an integrated design with flat glass and convex glass below the flat, mounted in a corrosion resistant housing, such as Rosco or Velvac mirrors. No stick on convex mirrors are allowed. Mirrors shall use heavy duty mounting arms and brackets which minimize vibration

A cross over type mirror shall be at the right front body corner. A 4 x 16 inch rectangular inside rear mirror will be installed for the driver's view of the bus interior. An internal rear-view mirror of at least 6 inches in diameter will be mounted at the right front of the bus at the windshield headliner. An OEM interior review mirror is also required. All mirror mountings are to be sufficiently rigid to prevent distortion from vibration. A convex mirror shall be mounted below both exterior side mirrors. Stick-on type mirrors are not acceptable.

Safety: Warning buzzer (back up alarm) is to be a minimum 90 decibels when transmission is in reverse. Interior buzzer to activate when emergency exit(s) is open. A master switch with light for lift, at driver's station, when equipped with a lift. The light at driver's station is activated when lift door is open or lift is in operation (when equipped with a lift). Also, an alarm pad located approximately over rearview mirror, is required to notify driver if specific emergency window(s) are ajar.

Each Vehicle must be equipped with one seatbelt cutter.

Emergency Equipment:

The manufacturer will furnish a safety kit with the vehicle that will include the following equipment: one 5 lb. Fire extinguisher; one industrial unit first aid kit of sufficient size to treat the number of persons equal to the designed seating capacity of the vehicle including the driver. In addition, a bloodborne pathogen kit must be included. Also, four 10 inche chem-lites (2-hour minimum) with hand-held and magnetic tri-pods, and three safety triangle reflectors. The chem-lites and reflectors shall be stored in box type containers and all emergency equipment shall be mounted in a location easily accessible to the driver and not in passenger

area. Also, a CPR kit to contain (gloves, CPR mask, gown, eye shield/face mask, disposable bag, viral towelette).

Radiator and Cooling System:
All vehicles will be equipped with heavy duty radiator with extra cooling capacity. The cooling system shall be designed to prevent engine overheating during prolonged idling at high ambient temperatures. Engine fan may be belt or hydraulic driven from engine crankshaft. Cooling system shall be of a pressurized type. Manufacturer's standard OEM housing or approved equal shall be used throughout the cooling system. All-weather type coolant shall be installed to protect to a minimum of -25 degrees Fahrenheit. The radiator filler neck shall be equipped with a safety pressure release cap and shall be in such a position as to permit checking and adding coolant from outside the vehicle. All fittings shall be of brass. All low points in the cooling system shall be provided with drain cocks.

Wiring and Electrical System: The electrical systems and equipment shall comply with all applicable FMVSS and shall also conform to all applicable SAE recommended standards and practices. All electrical and electronic components shall be selected to minimize electrical loads to prevent exceeding the vehicle's generating capacity. All electrical system components and wiring shall be readily accessible through access panels for checking and for maintenance. All switches, indicators and controls shall be located and installed in a manner that facilitates easy removal and servicing. All exterior housings of lamps and fixtures shall be corrosion resistant and weatherproofed. The electrical switch panel shall be mounted within easy reach of the driver, and shall incorporate all switches including, but not limited to, the following: passenger compartment light switch, rear air conditioning switches, rear heater switches. Back-lighted switches for night operation are preferred, however engraved, embossed, or etched are acceptable. The switch panel shall be slightly inclined toward the driver to facilitate ease of viewing and operation. Switch panel and/or switches, gauges, or controls located above the driver's head are not acceptable.
The electrical system shall incorporate a warning light and audible buzzer located on the switch panel to show a door ajar condition, especially with a wheelchair lift door. System shall be compatible with the interlock system. The bus body and accessory electrical equipment shall be served by circuits separate and distinct from the vehicle chassis circuits. All wiring provided by the bus manufacturer shall be copper and conform to all SAE J1292 or SAE J11285 XPE requirements.

All bus conversion wiring shall meet SAE standards. Each wire shall be color, number, and function coded or by system. These numbers and functions shall appear at a minimum of 6 inche intervals the entire length of the wire. The insulation covering on all conversion wiring shall be "GXL" and rated at 125 degrees C.

The wiring shall be routed in a split open-type loom. All looms and wiring shall be secured to the body or frame with coated or rubber-protected straps in order to prevent snagging and chaffing. This loom shall be temperature rated at 125 degrees C to adequately protect the secured wiring. To facilitate identification of conversion wiring from OEM wiring, the loom shall be blue or an alternate color.

All conversion harness and wiring terminals shall terminate at appropriate junction terminals encased in molded plastic material. All connections containing one to two circuits shall be made with postlock connectors. Any solder joints must be pre-approved by ALDOT. No butt connectors will be allowed.

All wiring devices, switches, and etc., except circuit breakers, shall be rated to carry at least 125% of the maximum ampere load for which the circuit is protected. Circuit breakers shall be of the manual reset type and designed specifically for each circuit. Fuses may be acceptable. Battery cables shall be a minimum 2ga., stranded cable with SGX covering rated at 125 degrees C. There shall be a master electrical component panel located in a weather protected compartment with access from the interior of the bus.

All switches supplied by the bus manufacturer shall employ permanently engraved labels. These shall be back-lighted. Decals or other " stick-on “type labels are not acceptable. The bidder shall provide a reverse direction or "backup" alarm which shall produce a repeating, audible tone at a 90dB level minimum.

A fast-idle system, Intermotive Gateway or equal shall be supplied. The system shall be fully automatic, requiring the park brake to be set to function and will increase idle speed when the rear air conditioner is activated. The fast-idle system shall automatically disengage when the parking brake is released or the transmission is shifted out of the "Park" position.

A complete "vehicle-specific" wiring schematic book shall be supplied with each vehicle upon delivery. Each circuit shall be displayed and correlate with the vehicle as specified. A legend shall be provided on the circuit box door that displays circuit fusing and identification information.

Frame:
Standard integral body type.

Bumpers:
Heavy duty front and rear bolted to the frame, of sufficient strength of 2.5 times the GVW rating of the vehicle. Two tow hooks at rear of sufficient strength of 2.5 times the GVW rating of the vehicle welded to the frame shall be installed so as to prevent damage to vehicle while towing and prevent dragging on inclines. The bumpers shall be a minimum of 7 inches high, 11-gauge steel and not less than the width of the vehicle. A red and white striped reflective tape shall be applied to both the front and rear bumpers. The tape shall be 3 inches in width. The tape shall be 3M 'Diamond grade' high intensity reflective tape or equal.

Body Construction:
An engineering drawing of steel cage structure including dimensions must be included with the bid. Failure to do so will render the bid nonresponsive.

The body structure shall be built as an integral unit. All joints and corners where stress concentration may occur shall be adequately reinforced to carry required loads and withstand road shock. The bus body shall be certified to meet the requirements of Federal Motor Vehicle Safety Standard No. 220 (school bus rollover protection) and a statement by the manufacturer

attesting to this shall accompany the bid. The state reserves the right to request a copy of the test report and data should it feel it is required.

Vehicle body shall be metal. Honeycomb fiberglass or other non-metal exterior panels is not acceptable. An aluminum skin or shell over fiberglass body will not be accepted. Exterior panels are to be bonded to the body framing. Attaching the aluminum skin through the use of tape is not acceptable. One piece FRP roof is acceptable.

The vehicle body structure must incorporate an integral, fixture-welded steel body framing for floor, front, rear, sidewalls and roof. The steel cage shall extend the driver/cab area as well as the passenger area. Fastening of floor to roof and roof to sidewalls by means other than welding is not acceptable. Any method of construction that is accomplished without welding or that results in a configuration that is unable to meet the quality and structural integrity as defined above, is not acceptable. The State of Alabama will be the final judge as to the acceptability of the proposed construction. Body construction utilizing fiberglass or plastic as primary support in stress bearing wall sections is not acceptable and will not be considered. The body shall incorporate steel structure as the primary load/stress bearing mechanism. The floor shall be a fixture-welded structure of minimum 12ga. steel (or 14 ga. equivalent strength) and shall be treated for corrosion protection.

The side and end framing shall be so designed and constructed that they will carry their proportion of the stresses around these openings. All posts in body side and roof sections shall be of durable construction securely fastened to the under-frame structure so that the entire frame shall act as one unit without any movement at the joints. The end posts shall be designed to resist shear.

The sidewall structure shall be the equivalent of 1-inch x 2 inches /16ga. or 1 ½ inches x 1 ½ inches 14 ga tubular steel welded on 16 inch centers. The exterior sidewall panels shall be .040-inch aluminum or .025-inch galvanized steel. The sidewall and roof shall be joined at the roof gutter above or slightly below the windows. All panels shall be installed so that they will shed water, that is, the leading panel shall be lapped over the following panel and in no case shall the sealing of the panels be dependent on caulking alone. Side panels below the floor line shall be steel and easily removable for service and repair.

The roof structural support members shall be the equivalent of 16ga. hat section roof bows, 1 ½ inches high by 3 ½ inches wide, spaced on approximately 16-inch centers.

Rear wall shall be .040-inch steel bonded or laminated fiberglass front/rear end caps. There shall be a steel cage under the caps to insure maximum passenger safety.

Sidewalls, front and rear walls and ceiling shall be insulated. The insulation shall be a minimum 1 inch thick, two pounds per square foot, high density polystyrene or equivalent sprayed material and be incorporated into the structure of the wall. The insulating factor of the completed wall shall be R-5 min.

After assembling, all steel body parts shall be given a thorough anti-corrosion treatment. Rust inhibitive primer paint shall be applied to all steel structural members including sidewalls, floor, roof, and the front and rear walls.

The body shall be bolted through the sub-floor structure to the chassis frame and utilize the rubber mounting pucks and hardware provided by the chassis manufacturer.

The mounting bolts shall be a minimum of Grade 8, 7/16 inches-14 UNC, and shall be torqued to the chassis manufacturer's requirement of 60-65 ft. lbs. Welding of any body mounting structure to the chassis frame is not permitted.

All nuts, bolts, clips, washers, clamps, and like fasteners shall be zinc or cadmium plated, or zinc phosphate coated to prevent corrosion.

The exterior sidewall of the bus shall be smooth. There shall be no exposed fasteners on the exterior of the bus.

Wheel housings shall be of one-piece construction, or welded into one-piece, 14ga. minimum. Wheel housings shall be constructed and adequately reinforced to prevent deflection. There shall be clearance provided for tires under load and operating on both smooth and rough terrain. Rubber fenderettes are preferred, however flexible plastic, or fiberglass is also acceptable. The entire body and roof shall be subjected to a leak test in a modern water spray

booth under high pressure for a minimum of 10 minutes. Results are to be recorded and included in each vehicle shipped. Where necessary, access doors shall be provided to facilitate air conditioning components servicing.

The entire body frame under-structure (including skirts) shall be fully undercoated according to the chassis manufacturer's guidelines and all junctures of floor and walls or any voids shall be sealed with a nonflammable resin-type material or equivalent.

All bright metal exterior trim shall be stainless steel, polished aluminum, or chrome plated. Water channeling or deflecting gutters shall be installed over all door openings and windows.

Bidder is to provide one tube of caulk for re-caulking after the first 1,000 miles.

Emergency Exit:

In addition to the emergency egress windows, there shall be a roof ventilator-emergency escape hatch. The hatch shall be a Spheros Smart Hatch or approved equal, 24 inches x 24 inches' minimum, when open and the bus is in motion, will provide fresh air inside the vehicle. Hatch shall be less than 1.5" above roof of vehicle. Hatch shall be mounted so as to eliminate drilling of holes to prevent leaking. It will also have an outside release handle. Interior release handle shall be ergonomically designed. All emergency exits shall be well marked with instructions for proper use.

Wheel Housing Stepwell:
Wheel housing shall be galvanized steel construction providing ample clearance of front wheel while steering. Wheelhouses and fenders must be constructed so as to permit removal of wheel hub assemblies as a unit. Wheelhouses shall be protected against corrosion with undercoating. Caution tape shall be on every door entrance step.

Stepwells will be adequately fastened to and supported from the body. Steps and risers will be in accordance with general dimensions as noted and will conform to federal regulations as per the Americans with Disabilities Act. Stepwells are to be on one-piece steel construction. Three-piece welded into one-piece is also acceptable. Stepwell is to be constructed of a minimum 11gauge steel at step and 14 gauge in sides adequately reinforced to prevent deflection. Stepwells must meet 500 lb. test. All steel must be treated for resistance to corrosion. Stepwell will be lighted and is to have first step no more than 12.5 inches from ground maximum, but not less than 10”, 10” step risers maximum, and a minimum of 9 inches step tread depth. All step risers shall be uniform in width. An angle stepwell design is not acceptable. All step edges shall have a band of yellow or white marking 3 inches wide running the full width of each step.

Radio:
AM-FM Stereo with CD player. Also to include clock as integral part of the radio. To include four (4) speakers (two in front and two in rear).

Driver’s Compartment:
A padded modesty panel with a smoked plexiglass panel is to be located behind the driver. The panel will be floor to ceiling (2 in to 6 in from roof to floor) and in close proximity behind the driver. A guardrail will be provided behind the driver, extending from the vertical stanchion to the left side of the coach 30 inches (approximately 2 inches above the floor). Stanchion and panel will not impair driver's seat adjustment

Instrument Panel & Control Switches:
A separate instrument panel shall be conveniently located in front of the driver. It shall include the following instruments:
Voltmeter gauge
Speedometer with recording odometer
Fuel gauge
Oil pressure gauge
Engine temperature gauge

Headlight high beam indicator
Directional signal and hazard switch on steering column
Sun visor on driver's side to be chassis OEM supplied
Four (4) speakers (2 in front; 2 in rear) pre-wired to dash
Turn signal lever (column mounted)
Emergency flasher control (column mounted)
Clearance or marker lights controlled by headlight control switch)
Passenger compartment courtesy lights.
Supply indicator light and audible alarm (buzzer) to warn drivers of low oil pressure and/or engine overheat. All control switches shall be located within arm's length and all gauges are to be visible from drivers seated position. Control switches will be designed for simplification of electrical controls and will be inclined for easy access to control switches. Control switches above dash are not acceptable. A pod mounted to top of dash may be acceptable. Application tape is not acceptable.

A control switch panel shall be located in the driver's compartment and shall be designed for simplification of electrical controls and shall be inclined for easy access to control switches.

Replacement Parts:
A supply of replacement parts for the vehicle specified must be guaranteed by the bidder of vehicles for a period of five (5) years from date of purchase. Bidder shall keep parts books and manuals up-to-date for a period of five (5) years by issuing revised pages or otherwise notifying the state of new or superseding parts and maintenance practices.

Inspection:
ALDOT reserves the right to inspect all material and workmanship at all times during the progress of the work. Final inspection and acceptance of the vehicle covered by these specifications shall be made by ALDOT.

Non-restrictive Clause: When brand names, trade names or manufacturer's names or catalog numbers appear in the specifications, it is intended to establish a performance standard. The manufacturer may request to substitute a similar product as specified in the above paragraph.

Delivery: Based on reasonable production time and with due consideration to unforeseen circumstances, the state shall expect that delivery on initial unit(s) covered by these specifications will be made within one hundred twenty (120) days of placement of purchase. Each vehicle must be delivered in 'showroom' condition.

F.O.B. Point: For bid purposes, all vehicles shall be delivered F.O.B. Alabama dealers location unless otherwise specified in the invitation to bid.

Certification: Shall meet all federal motor vehicle safety standards where applicable.

Wheelchair Lock-down & Foldaway Seat:

Two (2) wheelchair retractable lock-down devices per station capable of securing standard size manual or powered wheelchairs and seat belts for wheelchair occupants are to be installed. The tie-down shall be a Q-straint QRT-360 or equal. When the wheelchair space is not being used there shall be a two (2) person fold down seat available for use by non-wheelchair occupant passengers.

Manuals:

Manufacturer will supply one (1) current operator's manual(chassis) provided when the bus is delivered. Should the bus delivered be equipped with accessories not listed in the operator's manual, the manufacturer will provide supplementary material. Final vehicle records will be supplied upon delivery.
Additionally, a written maintenance and inspection schedule will be provided with each vehicle incorporating the required maintenance and inspection of the basic vehicle and its subsystems (i.e. wheelchair lift). Estimated MPG (miles per gallon) in city and highway mileage will be provided with each bid. Warranty papers for chassis, body and additional equipment will be provided for each vehicle. A parts manual shall also be provided.

Training:

Vendor will provide eight (8) hours of training that will be given to representatives of the end user agency, at the successful bidder's expense. The training will consist of all areas of production, preventive maintenance, warranty procedures, etc. Time and place of training to be established by ALDOT.

Workmanship:

Workmanship throughout the vehicle will conform to the highest standard of commercially accepted practice for the class of work and shall result in a neat and finished appearance. The design of the body and equipment which the manufacturer proposes to furnish must be such as to provide a vehicle of substantial and durable construction in all respects.

Welding procedures, welding materials, and qualifications of operators will be in accordance with standards of the American Society of Testing Materials and the American Welding Society. All welds visible to the public will be ground smooth after the welding to present a smooth, workmanlike appearance. Where metal is welded to metal, the contact surface will be free of scale, grease, and paint. All exposed surfaces and edges will be smooth, free from burrs and other projections and will be neatly finished.

All parts will be new and in no case will used, reconditioned, or obsolete parts be accepted. Allowance will be made for model year changes if/when contracts are renewed if such changes are submitted with renewal.

Motor Vehicle Standards:

The awarded vendor must certify upon delivery that the bus complies with all U.S. Department of Transportation safety standards for buses applicable as the date of manufacture, and complies with all interstate commerce commission requirements for motor buses operated

interstate commerce. The bus shall be in compliance with all requirements of the laws of the State of Alabama as to lighting equipment and all warning and safety devices.

The manufacturer shall certify that the bus conforms to the air pollution control standards set by the Federal Transit Administration for motor vehicles to be used on projects by FTA.

Tests and Testing: The complete vehicle and all working and moving parts and operating devices will be thoroughly tested and put in operating condition by the manufacturer. Any dealer identification, advertising, or similar material will not be attached to the vehicle. Prior to acceptance of vehicle, the manufacturer will service and adjust vehicle for operation to include, as a minimum, the following:
focusing of lights
adjustment of accessories
checking of electrical,
braking and suspension system
charging of battery
inflation of tires
servicing of cooling system with permanent type antifreeze and summer coolant for minus 25 degrees Fahrenheit
servicing windshield washer with water and appropriate additives
full tank of fuel.

Warranty:
The manufacturer shall state the terms and conditions of the vehicle warranty.
In no case will the warranty be less than the following:

Bumper to Bumper: 12 months or 12,000 miles
Chassis Manufacturer: 3 Years or 36,000 Miles
Rear Air Conditioning Unit: 2 Years/Unlimited Miles
Body Structural: 5 Years or 75,000 Miles
The bidder will state where warranty maintenance work may be obtained in Alabama.

ALDOT reserves the right to visit, inspect, and approve such facility before final award. All materials, specialty equipment or accessories that prove defective in normal operation within the above period will be replaced or repaired by the manufacturer free of any and all cost to the vehicle operator, including material and labor. Warranty replacement and/or repairs will be, facilitated promptly by the awarded vendor. The bidder will provide written assurance with the bid package regarding warranty repairs. All body parts shall be shipped in 10 calendar days or less.

Other parts are to be shipped in 3 calendar days, or must provide status report up-dates.

Documents:
All certifications must be signed by an appropriate representative of the bidder or manufacturer as required and properly notarized. Failure to attach all certifications will result in the automatic rejection of the bid

Documentation required with vehicle on delivery:

Certificate of origin for chassis

Certificate of origin for body

Bill of Sale

End user check for application for title ($18)

Warranty papers

Maintenance schedule

Spare key(s)

Operator's manual

Quality control inspections

All final tests/certifications

Vendor Customer Service Guide

Parts Manual

Wheel Alignment Certificate

ACCESSORY EQUIPMENT

The following equipment, when specified will be furnished. Note: bidder is responsible for furnishing required equipment to enable the vehicle to meet or exceed the specified GVWR when accessory equipment is requested. All accessory equipment is to be priced separately on the price sheets provided at the end of

The invitation to bid. All optional/accessory equipment must have appropriate operating instructions included with each vehicle upon delivery.
The award of the contract will be based on the base price of the vehicle plus options/ accessories and the lowest responsible bid along with considerations as listed in the terms/ conditions of bid.

Such accessory items will be a part of the bid specifications.

Also, bidder must include with the bid, floor plans for each accessibility package for each size vehicle.

Braun wheelchair lifts or approved equal:

Braun model # NCL 1000IB3451HB-2 (34 in x 51 in)

Note: all lifts must have pump located forward of platform.

Securement packages:

Sure-Lok Titan 800 or

Q-Straint # QRT-360

Or approved equal

The bidder shall offer both Trans Air and ACC Climate Control air conditioning systems. The choice shall be made by the end user at the time of order.

ALL HANDICAPPED ACCESSIBILITY PACKAGES MUST HAVE THE FOLLOWING FEATURES:

All wheelchair tie down tracks shall be reinforced below the floor by a minimum of 3 1/2 inch x 1 inch 11 Ga. steel "C" channel or flat steel and welded to the steel sub floor. All foldaway seats shall have reinforcing steel equivalent to 3 1/2 inch x 1 inch 11 Ga. steel "C" channel or flat steel welded to the steel sub floor below the seating position to strengthen the mounting points for these seats. In addition, the seats and seat belts must meet the requirements of FMVSS 207 and 210. Evidence that the seats were tested in the bus being bid must be submitted with the bid. All testing must be done in the bus; laboratory or bench testing is not sufficient as the bus sub floor is an essential part of the seating system. Additional springs shall be installed on the rear leaf spring packs of lift equipped vehicles with a GVWR less than 15,000 lbs. to offset the weight of the lift when it is deployed. This requirement will not apply to vehicles over 15,000 lbs. as the rear springs on these vehicles are sufficient to handle the weight of the deployed lift without the addition of extra springs.

Bidder must include engineering drawings of the vehicle floor showing extra steel to support the wheelchair securement area and third track as well as extra suspension for those vehicles to be ordered with accessibility packages as applicable to the specifications listed above.

According to the Americans with Disabilities Act (ADA), certain features are required to make a vehicle accessible to persons with disabilities. Those items required to make a vehicle ADA accessible are included in the various packages.

Note: All accessibility packages will be oversized.

The oversized or 0/S package includes: Lift capacity of 1,000 lbs. minimum. Vehicle shall be equipped with a fully automatic wheelchair lift mounted on the curbside of the vehicle, accessible via access door. The lift door on the right side of the vehicle shall have a 68” entryway and 44” width.

Wheelchair lift, platform type, shall meet ADA regulations.
The wheelchair lift shall include a platform with a minimum clear width of 34” and a minimum clear length of 50”.
The wheelchair lift shall incorporate an emergency method of operating if the power to the lift fails.
The wheelchair lift shall include handrails on both sides of the platform. (ADA 38.21)

Third track to accommodate longer wheelchairs approximately 8-10 inches ahead of forward track.

One additional 3-step foldaway type seat adjacent to third track may replace a row of standard bench seats.

All flips seats will be the 3-step foldaway type

Handicapped Accessibility Package (ADA/OS-2B)
Required for fixed route services.

Wheelchair Lift – Fully automatic, curbside mount between rear wheel and rear of vehicle.

Two forward-facing securement stations – Price to include credit for removal of standard seats.

Refer to attached floor plans for additional seating information.

One double foldaway seats – In conjunction with each securement station.
Ceiling grab rails – Shall be continuous full-length overhead on both sides of the vehicle. Rails will be located so that seated passengers are free from crowding from standees. Rails shall not have exposed ends. Wheelchair belt restraint storage– Such compartment shall be located to be easily accessible, yet not interfere with passenger traffic.

Priority seating signs: Each vehicle shall contain sign(s) which indicate that seats in the front of the vehicle are priority seats for persons with disabilities, and that other passengers
should make such seats available to those who wish to use them. At least one set of forward-facing seats shall be so designated.
Characters on signs required by paragraphs 1 and 2 above shall have a width-to-height ratio between 3:5 and 1:1 and a stoke width-to-height ratio between 1:5 and 1:10 with a minimum character height (using an upper case “X” of 5/8” with “wide” uppercase letters), and shall contrast with the background either light-on-dark or dark-on-light.

Farebox – A transit type farebox Diamond RV or equal and shall be mounted with trip handle located on driver’s side. It shall be mounted on a stanchion, braced, and easily accessible to boarding passengers. An amber or indirect farebox light shall be connected to dash instrument light. Two interchangeable lockable farebox vaults, keyed alike, with a double set of keys for each lock shall be supplied. Vault and farebox exteriors shall be marked with key reference. A padded grab rail shall be placed so as to assist passengers and to prevent them from falling onto the farebox and other forward areas. The bidder shall provide a description of the farebox with the bid package.

Destination signs – Front and boarding side signs will be digital Twin Vision, Transign, Hanover signs or equal. Adequate illumination for daytime or nighttime visibility with a minimum of 10 destination positions. Destination signs submitted with bid must be ADA compliant.

Public Address system, with an additional external speaker.

Flat Floor.

Stop Request Signal: A pull cord, touch tape, or other stop request system shall be installed on both sides of the interior, to include and be adjacent to any wheelchair securement station. The signal cords, etc. will be located so they may be easily reached by passengers while not interfering with emergency exits. Such a system shall provide both auditory and visual indications that a stop request has been made. The auditory signal shall be a buzzer type, audible as long as cord is pulled. A singular, non-repetitive tone is not acceptable. Controls required by this section shall be mounted no higher than 48” and not lower than 15” above the first floor, shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no greater than 5Lbs.

Handicapped Accessibility Package (HAP/OS-1B)

Suggested for Demand/Response systems.
See specifications as stated below:
Wheelchair Lift
One forward-facing securement station
Refer to attached floor plan
Ceiling Grab rails
Wheelchair belt restraint storage
Priority seating signs
Fast Idle
Flat Floor

Handicapped Accessibility Package (HAP/OS-2B)

Suggested for Demand/Response systems.
See specification as stated below:
Wheelchair Lift
Two forward-facing securement stations
Refer to attached floor plan
Ceiling Grab rails
Wheelchair belt restraint storage
Priority seating signs
Fast Idle
Flat Floor

Handicapped Accessibility Package (HAP/OS-3B)

Suggested for Demand/Response systems.
See specification as stated below:
Wheelchair Lift
Three forward-facing securement stations
Refer to attached floor plan
Ceiling grab rails
Wheelchair belt restraint storage
Priority seating signs

Fast Idle
Flat Floor

Handicapped Accessibility Package (HAP/OS-SP)

Suggested for Demand/Response systems.

See specification as stated below:

Wheelchair Lift
Four Forward-facing securement stations (25 Passenger 6 Stations)
Refer to attached floor plan
Ceiling grab rails
Wheelchair belt restraint storage
Priority seating signs
Fast Idle
Flat Floor

HAP Special Package Specifications: Requires a minimum interior ceiling of 69” with no wheel wells protruding above the floor. The bus will have a paratransit flat floor from side to side and from driver seat to back wall. The seating area of the vehicle shall be covered with a minimum 3/4” thick marine AC grade plywood or 3/4" exterior grade plywood with polyethylene underbelly covering which meets FMVSS 302. The floor should be fire retardant and securely bolted to the vehicle sub-floor. The entire body frame understructure of the vehicle shall be fully undercoated with a nonflammable resin-type material, poly-oleum or approved equivalent, applied at the time of manufacture. Passenger compartment floor is to be covered with a silicon carbide and pure vinyl slip resistant floor covering. Surface to be minimum 2.2 mm thickness and provide 12-year warranty, such as the Altro Transflor Meta or the Tarabus NT Sirius, or equivalent. The floor shall be a light color to match or complement the seats (black is not acceptable). Floor covering shall be cemented to the floor to prevent bubbles and blisters which could create a safety hazard. All seams are to be heat welded. No cross joints in the flooring will be allowed. The exposed edges of the plywood and vinyl at all entrances shall be trimmed with metal edge trim securely fastened. All step edges, thresholds and the bearing edge shall have a band of color(s), running the full width of the step or edge which contrasts from the step tread and riser, with either a light-on-dark or dark-on-light color scheme. Floor area designated for wheel-chair occupancy will be free of obstacles (i.e.- heater).

These items will be provided as “built for individual unit”.

Vehicle title Or Certificate of Origin: To be assigned as follows:

(The receiving project name and address)

(First Lienholder)
Alabama Dept. of Transportation
1409 Coliseum Boulevard
Montgomery, AL 36110

To be mailed to:

Alabama Dept. of Transportation
Local Transportation Bureau
1409 Coliseum Boulevard
Montgomery, AL 36110

AVAILABLE ACCESSORIES

The following equipment, when specified will be furnished. A separate price list will be provided for all accessory equipment. Such accessory items will be a part of the bid specifications.

NOTE: Bidder is responsible for furnishing required equipment to enable the vehicle to meet or exceed the specified GVWR when accessory equipment is requested. The award of the contract will be based on the base price of the vehicle plus options/ accessories and the lowest responsible bid and considerations as listed in the terms/conditions of bid. Also, bidder must include with the bid, floor plans for each accessibility package for each size vehicle unless otherwise.

ADDITIONAL ACCESSORY EQUIPMENT

Electric passenger door

Donation Box – 16ga. metal 8 inches H x 4 inches W x 6 inches D, locking with 2 keys to include padded stanchion attachment. DIAMOND #DMI or approved equal

Energy Absorbing Bumper - Rear.

Battery Maintenance System-(Power Pulse 12V 14735X012, or approved equal).

Sonar type Back-up Alarm

*****Note: the sonar alarm will be mounted in addition to the standard back-up alarm. MODEL HINDSIGHT-300 or approved equal

Vehicle Lettering**:** 'Public Transportation' on front/rear end caps, plus Agency name/telephone on sides.
For 5307-5311 Grantees. All lettering must be 6 inches, capital letters, and centered.

Vehicle Lettering: Agency name/telephone number on sides. For 5310 Grantees. All lettering must be 6 inches, capital letters, and centered.

Exterior Graphic Design: Exterior graphic design shall consist of either a painted or vinyl overlay installation or combination of both projecting a trolley like appearance (includes colored side panels, striping & scrolls). Vinyl shall be applied by a professional installer with the theme and content of the total vinyl work modeled in the trolley motif and when completed, the exterior vinyl shall give the bus a trolley like appearance. Bid must include a complete drawing of the vinyl design and all relative information on the application process. No part of the design shall infringe on the

copyrights of any other vinyl wrap designer/installer. Color: Blue, Green, Burgundy, Dark Red

Advertising Package: Exterior Advertising Brackets-vendor to include options for number and location of brackets with the bid. Brackets shall include three permanent sides and one detachable side. The brackets shall be mounted from immediately below the agency stripe and be the largest appropriate size. * 2/SIDE, 1/REAR Specify one row both sides of bus at wall/ceiling joint) *Specify size of brackets per vehicle. size of brackets per vehicle. -Interior Advertising Brackets-

Power Base Driver Seat

Integrated Child/Companion Seat

Surveillance System:
Color
Digital Video Recorder-shall be lockable and tamper proof
Minimum 20 frames/second
720 x 486 pixels NTSC or equal
Three Color Cameras, minimum
Lux of 0.1 or better with infrared LED
Housing unit with security lock
24-hour record time
Day, Date, Time imprints
Built-in microphone

Operation auto-on at ignition, auto-off at ignition kill or 30 seconds after-no external flashing light

Hard Drive-30G min with back-up and be “hot swappable”

8 mm split screen,

Other Features--ability to download images to PC, ability to print/e mail images, programmable timers

Power 12V DC source, 1. 16g wire minimum. 2. Internal surge protection

ALABAMA DEPARTMENT OF TRANSPORTATION
VEHICLE SPECIFICATION TEXT

BID ITEM: CUTAWAY CHASSIS BUS-HEAVY DUTY

A heavy duty Cutaway type transit bus, Metal Body, 28-30 Passenger, State Purchasing Reference No.T-904.

The Alabama Department of Transportation (ALDOT) is soliciting bids for the vehicle designated as the bid item. These specifications are intended to provide the basic requirements for the vehicle described. It is not the intent of the specifications to restrict bids for any vehicle that will comply with the design features and functions described herein. These specifications are intended to meet the basic needs of the transit providers and insure the safety of the passengers.

The bids received must be based on the most up to date equipment and appurtenances for the life of the contract awarded. Any variation proposed from the equipment and appurtenances must be equal to or better than the equipment shown in the specifications. ALDOT will make the final determination regarding the quality and cost of any alternatives proposed.

Each vehicle submitted by the successful bidder must meet, or exceed all of the specifications contained in this "invitation to bid" and must meet the requirements of the Americans with Disabilities Act, 49CFR, Part 38, Subpart B — Buses, Vans and Systems.

At the request of ALDOT, the manufacturer shall present test reports and/or certifications which substantiate the vehicle being offered complies with all Federal Motor Vehicle Safety Standards (FMVSS) and Environmental Protective Agency (EPA) emission standards.

The manufacturer shall present with bid a certified copy of full report indicating the vehicle meets all safety requirements based on tests performed at the Altoona Bus Testing Center.

SEATING FLOOR PLAN BID OPTIONS: (see attached diagrams):

28-30 Passenger (217” Minimum Wheelbase)

FLOOR PLAN OPTION I **(Gasoline- Handicapped Accessibility Package OS/2B)** As per the diagram.

FLOOR PLAN OPTION II **(Diesel- Handicapped Accessibility Package OS/2B)** As per the diagram.

FLOOR PLAN OPTION III **(Gasoline- Handicapped Accessibility Package OS/4B):** As per the diagram.

FLOOR PLAN OPTION IV (**Diesel**- **Handicapped Accessibility Package OS/4B):** As per the diagram.

FLOOR PLAN OPTION V **(Gasoline- Handicapped Accessibility Package OS/SP Flat Floor):** As per the diagram.

FLOOR PLAN OPTION VI **(Diesel- Handicapped Accessibility Package OS/SP Flat Floor):** As per the diagram.

FLOOR PLAN OPTION VII **(Gasoline- Handicapped Accessibility Package ADA/OS-2B):** As per the diagram.

FLOOR PLAN OPTION VIII **(Diesel- Handicapped Accessibility Package ADA/OS-2B):** As per the diagram.

General Dimensions:

Seating Capacity	Approximately 28-30
Overall Length	Maximum – 400 inches
Overall Width	Maximum – 96 inches
Overall Height	Maximum – 122 inches
Interior Width (at seat cushion)	Minimum – 90 inches
Interior Height (at center aisle)	Minimum – 77 inches
First Step Height from Ground	Maximum – 13 inches
Step Riser Height	Maximum – 10 inches
Step/Tread Depth	Minimum – 9 inches
Floor Height from Ground	Maximum - 38.5 inches
Seat Width Seat	Minimum - 17.5 inches
Spacing Aisle	Minimum - 27.5 inches
Width	Minimum – 14 inches
Entry Door (clear opening width)	Minimum – 29 X 80 inches
Gross Vehicle Weight Rating (GVWR)	Minimum - 19,500 pounds;
	Maximum – 25,990 pounds
Wheelbase	Minimum – 217 inches
Fuel Tank Capacity (Largest OEM)	Minimum - 55 gallons

The Alabama Department of Transportation will allow cutting of chassis for the purpose of increasing or decreasing the chassis length. This will be verified through serial number checks. The rear overhang, measured from the center of the rear axle to the outer edge of the rear bumper, cannot exceed 1/3 of the overall vehicle length. Rear frame extensions shall be Butt-welded with a continuous weld and shall exceed the requirements of the chassis manufacturer. Any vehicle that exceeds the OEM GVWR and/or GAWR will not be accepted. Further, the ALDOT will not allow re-certification of the chassis OEM GVWR and GAWR.

All vehicles shall be weighed "as built" before release and manufacturer's engineering department shall perform a four corner weight analysis on each vehicle that indicates the

weight of the vehicle and any attachments, the maximum weight of the occupants, and the weight of a full tank of fuel for GAWR and GVWR evaluation. A copy of the "as built" weight certification, four corner weight analysis and an "as built" floor plan shall be on each vehicle shipped to ALDOT.

The "as built" weight certification shall provide the following information:

a. VIN of the bus
b. Manufacturer
c. Body Serial Number
d. A description (type) of the bus
e. Date
f. Number of ambulatory passengers including driver
g. Number of wheelchairs
h. Four-wheel weight distribution of the actual completed vehicle including all attachments
i. Four-wheel weight distribution of the weight of the passengers including driver
a9. Four-wheel weight distribution of the weight of the passengers, wheelchairs and the driver.
aa. Four-wheel weight distribution of the weight of a full load of fuel.
ab. Four-wheel weight distribution of the total weight of the vehicle.
ac. Weight analysis must have signature and title of person submitting it.

Chassis Related:

Chassis Type: Ford F550 (or approved equal); includes axle oil seals for front and rear axles.

Engine: Gasoline Engine: Manufacturer’s OEM 6.8L (or approved equal) capable of operating the vehicle at full capacity.

Diesel Engine: Manufacturer’s OEM 6.7L (or approved equal) capable of operating the vehicle at full capacity.

Fuel System: 55-gallon minimum, dual fuel tanks acceptable. The fuel system will be designed to prevent fumes from escaping into passenger compartment. Tank(s) to be internally baffled to prevent surging, along with a fuel/water separator (with diesel) and an engine mounted fuel filter with replaceable-type

elements. If dual tanks are provided, they must be refueled through a single filler neck/opening on the vehicle. If dual tanks are provided, there must be no action required by the driver to switch between tanks. The fuel system must meet federal standards.

Transmission: The transmission shall be a Ford OEM automatic heavy duty 5 speed TorqShift ® or approved equal. An auxiliary oil cooler with the capacity to match the GVWR is required. Transmission shift lever shall be interlocked with the engine starter motor to prevent engagement of the starter in a gear other than park or neutral. Driveshaft Guards required on each section of driveshaft.

Suspension: Front Axle: Minimum 7,000Ibs.1-Beam Rear Axle: 13,500 lbs. Manufacturer's heaviest duty front and rear suspension. Heaviest duty springs and shock absorbers must be adequate to match specified GVWR for fully loaded bus. Heavy duty rear stabilizer bars are required. A Hub-o-meter must be provided on the rear, curbside wheel hub.

Suspension is to be matched to GVWR. Successful bidder shall furnish full certification along with supporting documentation on ability to meet the said specifications and shall indicate certified curb weight and GVWR based on axles, suspension system, and tires.

After installation of cast and camber kit, a front end alignment will be required of the manufacturer after the bus is completed and prior to delivery to the customer. A report printed after the alignment has been completed shall be provided with the delivered vehicle.

Steering: The steering wheel shall be adjustable with soft rim. Steering column shall be tilting type with cruise control. All steering linkage with wear points, including tie rod ends. Shall be equipped with OEM power steering.

Brakes: Bus must be equipped with both service and parking brakes that comply with FMVSS #105.

a. Service brakes - The service brakes shall be capable of stopping the vehicle from a speed of twenty (20) mph with a seated load of one hundred fifty (150) pounds per passenger at a rate of deceleration equivalent to a stop within twenty-two (22) feet. Brakes shall be OEM Anti-lock brake system (ABS), hydraulic power-assist with hydraulic disc brakes and be adequate to the GVWR of the vehicle.

b. Parking brake - The parking brake shall be capable of holding a fully loaded vehicle on a 15% incline. The system shall incorporate a warning light on the instrument panel to indicate to the driver when the brake is applied.

c. The controls for the wheel chair ramp shall be interlocked with the vehicle's parking brake and transmission to ensure the vehicle cannot be moved when the ramp is not stowed and so the ramp cannot be deployed unless the interlocks are engaged. The interlock must meet ADA Title 49 Lift Interlock requirements

Wheels: The bus shall have single front and dual rear wheels and comply with FMVSS 120. The wheels shall be of heaviest duty available, steel and be fully interchangeable. Wheel bearings shall be extra heavy duty. Wheels are to be 19.5 inches. A spare wheel and tire of the same size shall be provided to match other wheels/tires. All wheel rims are to be painted white on both sides.

Tires: Tires shall be tubeless steel-belted radial type. Wheel balancing and alignment verification **must** accompany each vehicle upon delivery.

Battery: Dual heavy duty, 12 volt, minimum 750 CCA (1500CCA total) maintenance free types in readily accessible locations. The battery tray shall be treated for resistance to corrosion and shall be supported on a ball bearing slide mechanism. **Battery trays are required to be double locking.** The battery access door shall be lockable and located in the skirt area on a slide tray. A battery door hold open device shall be installed for service. Parallel wiring is also acceptable. **All lift packages will include battery maintenance system Power Pulse, 12V, and # 735X012 - or approved equal.**

Alternator: GASOLINE powered vehicles: 240-amp minimum, 12-volt, V-Belt drive or serpentine belt. Alternator shall have internal voltage regulator.

DIESEL powered vehicles: Dual alternators, 332-amps minimum, 12-volt, V-Belt drive or serpentine belt. Alternators shall have internal voltage regulator.

Radiator/Cooling: All vehicles will be equipped with heavy duty radiator with extra cooling capacity. The cooling system shall be designed to prevent engine overheating during prolonged idling at high ambient temperatures. Engine fan may be belt or hydraulic driven from engine crankshaft. Cooling system shall be of a pressurized type. Radiator tanks shall be the heaviest available from chassis manufacturer. All fittings shall be of brass or OEM. All-weather type coolant shall be installed to protect to a minimum of -25 degrees Fahrenheit. The radiator filler

neck shall be equipped with a safety pressure release cap and shall be in such a position as to permit checking and adding coolant from outside the vehicle. All fittings shall be of brass. All low points in the cooling system shall be provided with drain cocks. Auxiliary heater/coolant fluid shut-off valves shall be included as standard equipment.

Bumpers: The vehicle shall be provided with heavy duty OEM front and rear energy absorbing bumpers. Both front and rear bumpers shall be heavy duty steel, full width.

Bumpers shall be fastened directly to the chassis frame to allow shock from impact to be transmitted directly to chassis frame. The rear bumpers will be installed using heavy duty brackets bolted to the frame or frame extension. The bumper shall be bolted directly to the bumper brackets with a minimum of eight (8) bolts, four (4) each side. The bolts shall be a minimum of 7/16 inch, grade 8. Bumpers shall not be welded to the frame. Front and rear bumpers to be OEM heaviest duty available. Rear Bumper shall be painted black, 11 gauge and 9 inches wide. A red and white striped reflective tape shall be applied to both the front and rear bumpers. The tape shall be 3 inches in width. The tape shall be 3M `Diamond grade' high intensity reflective tape or equal.

Two recessed tow hooks of sufficient strength to tow 1 ½ times the GVWR of the bus are to be installed as per OEM to prevent damage to the bus while towing and prevent dragging on inclines.

Exhaust Systems: The vehicle shall be equipped with a heavy duty, corrosion resistant exhaust system which meets or exceeds FMVSS and EPA noise level and exhaust emission (smoke and noxious gas) requirements. Heavy-duty exhaust hangers shall be standard equipment and shall be bolted to the frame. Hanger U-bolt thread orientation shall be directed sideways. All exhaust joints shall be welded with a continuous weld.

The tailpipe shall terminate behind the left rear wheel and shall be deflected down toward the street. Tail pipe shall provide maximum ground clearance in the departure angle area. The pipe should turn immediately aft of the fuel tank and follow a straight line to the termination point at the roadside rear corner. Routing must meet Federal, State, and OEM up-fitter guidelines.

Exhaust system shall be leak proof and designed and constructed to minimize fire hazard. All parts must be made of corrosion resistant materials. Flexible tubing shall not be used in the exhaust system

Galvanized heat shielding shall run between the exhaust and the floor of the vehicle, this shield at a minimum shall meet OEM Up-Fitter Guide requirements

Body-Structural: (Listed dimensions are approximate)

Body Structure: The body structure shall be built as an integral unit adequately reinforced at all joints and corners where stress concentration may occur to adequately carry required loads and withstand road shock without deformation, cracking or other structural failure. The body shall be independently certified to meet FMVSS 220 and 221. Certifications must be submitted concurrent with

submission of the Altoona Bus Testing Report. Failure to do so will render the bid non-responsive.

Sidewalls: The side frames are constructed of a combination of 1" X 2" 16 ga. steel tubing, 11 ga. "C" channel and 11 ga. sheet steel welded on 38 inch centers or less. The longitudinal stringer above the window is constructed of 14 ga. 1" x 2" tubular steel. A 16-ga. "z" rail is welded to the bottom of the sidewall assembly for correct positioning on the floor assembly. All tubing is welded on all sides and ground smooth where needed. All components of the structure are jig welded and then mated together. They are joined by 2-inch stitch welds on 9-inch centers. The exterior skin is 20 ga. galvanized steel, or equivalent, which is luan laminated (or an approved process) to the interior side. The process must provide adhesion for the spray foam which is applied when the skin is mated to the side frame. The skin is placed in a vacuum jig which pulls it into conformity with the sidewall and foam is sprayed into the voids between frame members. The installation of the windows provides an additional mechanical attachment of the exterior skin to side frame. Window framing includes steel radius gussets welded on the four corners of each window. Entry door and lift door rough openings are integral parts of framing.

Roof: The roof frames are constructed of a combination of 1 ½" X 3 ½" 16 ga. steel tubing, forming a hat section roof bow, spaced on 18 inch centers except at the roof hatch. One roll bar of a minimum of 7-ga. steel shall be installed at the center of the roof structure and will be welded to the top of the sidewall frames. Sidewall, roof, and floor members, when welded together provide a continuous "hoop" that completely encircles the bus body. The roof is composed of a 20 ga. galvanized skin and is joined with "z" joints, sealed with industrial grade water resistant adhesive sealant adhesive. The roof must be constructed without voids. The roof hatch is integral part of the framing. *A FRP one piece roof is acceptable*.

Rear Body Panel: The rear frame is constructed of 1 ½" x 2" 16 ga. steel tubing, and is welded to the sidewall frames, floor frame, and roof frame. Rough opening for the emergency kick out window is an integral part of the framing. The rear skin is again 20 ga. galvanized steel, bonded to the rear frame and joined vertically by sealed lap joints. The circumference of the junction of rear wall and sidewall is trimmed with a ring of molded FRP. The front portion of the roof, over the driver's area has the same 1 ½" x 2" 16 ga. cage as the rest of the vehicle. Front and rear end caps may be fiberglass provided there is a steel cage under these caps to insure maximum passenger safety.

All body panels (roof, sidewalls, and rear wall) shall be laminated with appropriate thickness, two-pound high-density polystyrene to provide an insulated body structure with a minimum R-5 value. An alternate method is acceptable if R-5 minimum is achieved. All methods must meet the Federal Motor Vehicle Safety Standards (FMVSS) and the Advanced Design Bus (ADB) Crash worthiness Test requirements.

All dimensions, positioning of components, clearances, etc., shall be based on adult passengers.

Any sound deadening or cushioning material between the body and the chassis must be designed and installed in such a way as to prevent the failure of such material creating a safety hazard.

All interior and exterior fiberglass reinforced plastic panels and assemblies shall meet the flammability protection requirement of FMVSS-302.

Floor: The entire steel floor shall be a fixture-welded structure. Steel floor structure shall be the equivalent of the following: a 2” x 2” 12 ga. steel tube perimeter with 2” x 2” and 1” x 2” 12 ga. tubular steel cross sections on 16” centers. Floor channel frame shall be 12 ga. steel 1” x 3 ½”.

The entire body steel cage frame (floor, walls, roof, front and rear) shall be securely welded together to provide an integral one-piece body structure. Fastening of floor to sidewalls and sidewalls to roof by any means other than welding is not acceptable.

Flooring: The floor surface shall be covered with wall to wall slip resistant minimum 2.2 mm Gerfloor Sirius NT, Altro Transflor Meta or equivalent.

A floor will be provided and be constructed of minimum ¾” marine grade plywood, sealed with rot proofing materials. All plywood is to be treated with No-Flame, flame proofing solution or approved equal. Plywood flooring is to be supported by steel floor supports to minimize floor flexing. Floor should be securely attached to frame members or steel floor will be properly prepared for application of rubber floor covering having anti-skid properties. The entire area will be covered with rubber cement or OEM recommended material before application of floor covering. All flooring adhesive must be oil resistant.

All joints in flooring will be of the butt cut joint type, properly sealed. A white standee line will be provided across the aisle at the rear of the driver's seat. Also, the flooring shall include a fuel sender plate located in the aisle above the fuel tank. The fuel sender plate shall not be less than 12 inches x12 inches and be of diamond plate material. Such plating must be installed so as to be flush with passenger area flooring. Floor color is to be black.

Body Insulation: Insulation will be provided in sidewalls, end caps, roof, floor driver's area, and fire wall areas. Insulation shall be adequate for zero degrees Fahrenheit winters and one hundred degrees Fahrenheit summers. The insulation shall be non-formaldehyde, fire-resistant, non-hygroscopic, and resistant to fungus. Insulation shall prevent condensation and thoroughly seal bus so that drafts cannot be felt by the driver or passengers during normal operations with the passenger and lift door(s) closed.

Manufacturer shall install spray-in-place urethane foam having a minimum "R13" value in all structural voids.

Insulation shall not cover up switches or electrical devices and not be sprayed in wheel wells. All insulation shall meet FMVSS tests and requirements.

Wheel Housings: Rear wheel housings are constructed of 11 ga. galvanized steel, welded to the floor and sidewall structure. The wheel housings shall not protrude above the floor more than 15". The application of spray-in-place foam provides additional corrosion protection. Fender skirts provide protection and dressing for the exterior wheel wells. Mud flaps are standard equipment for vehicles offered, front and rear.

Step Wells: Step wells shall be of one-piece 11ga. galvanized steel construction. Step well is to be constructed and adequately reinforced to prevent deflection or buckling under the weight of a 500 pound passenger. The sidewalls and backside are of one-piece construction of 14 ga. galvanized steel. The step well and entry door framing are fabricated in a jig and then welded to the vehicle as one unit. Integrally molded white nosing's are to be furnished on all edges including floor level. Step treads must be designed and installed to exclude or minimize any overhanging edge, lip or trim. The vertical riser must be as flush as possible where it meets the next step tread. Lights in and above the step well will illuminate step well. All steel shall be treated for resistance to corrosion. Step well is to have first step 13" from ground maximum, 10" step risers maximum, and a minimum of 9" step tread depth. All step risers shall be uniform in width. An angled step well design is not acceptable. **Caution tape shall be on every door entrance step.**

The body shall be bolted through the sub-floor structure to the chassis frame utilizing rubber mount pads and Grade 8, 7/16" 14 UNC bolts torqued to 60-65 ft-lbs. (manufactures recommendation) to hold the body to the chassis frame structure. Welding of body to understructure chassis frame will not be permitted.

The entire body frame under structure of the vehicle including the joints of floor and walls or any voids is to be fully undercoated with non-flammable resin-type material, polyoleum or approved equivalent, applied at the time of manufacture of the body and the interior items are installed on the vehicle.

Doors: The vehicle shall be equipped with a 14-ga. steel framed entry/exit door. The door shall have a full clear opening width of not less than 29" and a full height of not less than 80". The passenger entry door shall be located directly across from the driver at a 90 degree angle for maximum viewing of entry way. The entry door shall be fully encompassed by an integrally welded steel door surround. The complete door surround and header shall be minimum 14-ga. steel or equivalent strength aluminum and will incorporate the step well, and be installed in the body as a single unit. The entry door shall be a two-leaf, outward opening type, and be opened by air, hydraulically or electrically.

Full length glass shall be provided for full visibility of passenger and curb area. Glass in door shall be D.O.T. certified. Plexiglas with upper glass inserts is acceptable.

Passenger door(s) shall be equipped with a locking device when closed. Door operation will be controlled by an open/close switch with red/green safety indicator lights mounted in the driver's area.

At the meeting edges of each door leaf, a 2" rubber seal shall be installed so that the edges form a tight overlapping weather proof seal when closed.

A padded modesty panel shall be located to the left of the passenger entry door. The panel(s) will be attached to the vehicle wall and extend only to a point where it will not interfere with the aisle.

Water channeling rain gutters must be installed above every door.

Lockable access doors shall be provided where necessary to service transmission, engine, radiator, battery, electrical and air conditioning components.

Wheelchair Door: The wheelchair lift door shall be located on the right or curb side of vehicle and between the rear wheel and rear of the bus. Bidder shall submit diagram of possible locations with the bid. The wheelchair lift door shall be hinged with outward opening panels. The lift door shall provide 68" minimum of walk-in headroom as measured when lift is in full raised usable position. The lift door shall have a 43” minimum clear opening width.

The double leaf lift door(s) shall be such as not to protrude more than 2 – 4 inches past the side of the bus body. A door flush with bus body is preferred. Each door leaf shall have an exterior locking handle. The leading door leaf must close over the trailing door leaf so that the failure of a latch will not cause the door to accidentlly swing open with the vehicle in motion. Each door shall have glazed windows which will provide an appearance similar to that of the rest of the vehicle and meets all applicable FMVSS. The lift door shall be equipped with a metal safety device to hold the door securely in full open position when lift is in operation and to prevent door from coming in contact with bus body. The door will have a permanently mounted latch that will hold the door in the open position with less than 1” of movement. The edge of the lift door shall have a roll-stop device. Securement of the doors in the open position shall not rely on bolts or straps. A hydraulic piston may be used to secure the right-hinged door in the open position for wheel chair door(s) mounted between the axles.

Design of lift door and hold-open devices shall be submitted with the bid. The wheelchair lift door shall meet all federal ADA regulations. Also, a spotlight meeting ADA requirements is to be mounted inside the vehicle approximately over the lift door capable of lighting the lift platform as well as the immediate surrounding area. An alternative to the wheelchair lift door (such as a lift mounted in the passenger entry door area) may be considered, provided such lift complies with all ADA requirements and detailed specifications, schematics, and test certifications are submitted with the bid. The lift door shall display an appropriate handicap decal not less than 9” x 9” in size.

Emergency Exits: There must be a emergency escape hatch. The hatch shall be a Spheros Smart Hatch or approved equal, approximately 24” x 24”. When open and with the bus in motion, will provide fresh air inside the vehicle. Hatch shall be less than 1” above the roof line of the vehicle. Hatch shall be mounted so as to eliminate drilling of holes to prevent leaking. It will also have an outside release handle. Interior release handle. Handles shall be ergonomically designed.

Two hinged emergency escape windows must be provided on each side of the passenger area of the coach. The windows shall be not less than 36” x 36” in dimension. In addition, the rear window shall also be a hinged emergency kick-out type, with a minimum of 49¼” wide X 31½” high frame and interior dimensions of a minimum of 44¾” wide X 26½” high. All emergency or kick-out windows shall have positive latches. Spring-loaded retainer(s) are not acceptable.

All emergency exits shall be well marked with instructions for proper use.

Windows: All windows shall be designed and installed in compliance with FMVSS 205 and 217. The windshield is to be a fixed one-piece design, ¼” tinted, laminated, double density, safety plate glass set in heavy rubber channels. The windshield shall be designed and installed in such a way as minimize glare from interior or exterior lights during nighttime operation. The driver's window shall be OEM

standard power window. The side passenger windows shall be transit-type 1/8" tempered safety glass.

Passenger windows must open to ensure ventilation and designed to prohibit sliding movement of windows on sudden stops and will be free of rattles and have heavy duty locking features. A top T-Slider without screens is acceptable.

It is desired to maintain a transit type appearance; school bus windows will not be accepted. A full sliding up to down or side to side window is not acceptable.

The rear window shall also have an 10 inches x 13 inches minimum Fresnel or wide angle lens attached. All passenger windows must be safety glass with an AS-3 marking. Windows are to be dark tinted to a maximum of 31% light transmission.

All passenger windows shall be installed in black powdered or anodized aluminum frames, or equivalent. Each passenger window shall be not less than 36 inches x 36 inches in dimension. Smaller transition windows are allowed. The window seal rubber must be of such quality as to resist vulcanizing to either sash or sills. Caulking around windows shall be used only as a seal, not to make up for body defects or out-of-tolerance window openings. Molding(s) will be provided above side windows to prevent rain from falling or blowing directly into window on passengers.

Lights:

Exterior Lighting: All exterior lights must comply with federal and State of Alabama requirement. ICC exterior lighting to include side directional signals. Also, round 7" lights, 2 front amber and 2 rear red, to be activated by brake pedal and must flash when passenger and/or wheelchair lift door is open. These lights must operate independently of turn signals. All exterior clearance lights must be armored or recessed. All clearance, Weldon or equal type, marker, and tail light assemblies including back-up lights shall be LED type.

Reflectors: Reflectors shall be size, type color and location required to comply with the requirements of both FMVSS - 108 and the regulations established by the State of Alabama.

Interior Lighting: The instrument panel will be indirectly lighted. The step wells will be adequately illuminated. The door step light 2 foot-candle minimum measured at step tread, will automatically engage when the door is opened. Door step lights not working automatically but turning on with outside lighting is acceptable. Adequate lighting will be provided to illuminate the aisles. Power on/off override shall be available to the driver for the overhead dome lights. All interior lights shall be mounted to the ceiling, underside of overhead racks, or sidewalls (storage compartments are not acceptable for mounting). All interior lights shall be LED (Light Emitting Diode).

Lift equipped vehicles shall have an overhead dome lamp at the lift area. Interior lighting must also include red indicator LED lights above each emergency window.

All interior materials will meet or exceed the flame spread requirements of FMVSS 302.

Seats: The driver's seat shall be transportation quality with retractable seat belt and a full range of adjustments fore and aft, high back, and with flip up arm rests.

Seat cushion and back will have spring supports and foam padding and be upholstered in transit-grade vinyl #686 Newport Ash Gray or approved equal. Seat frame and pedestal are to be covered in black paint. All standard passenger seats shall be installed with "T-Legs into wall and floor seat track. The seat track must be welded to the steel structure of the sidewalls and the floor. All seats shall be easily adjustable and removable from interior of the vehicle. Seats are to be consistent with standard transit quality construction. School bus type seats are not acceptable. Seat frames are to be constructed of heavy duty 1" diameter, 16 ga. steel tubing. All seat frames are to be welded. All seats shall provide a minimum width of 17" per passenger, or 35" per two-passenger bench. Seat backs are to be 34" in height measured from floor to the top of the back of the seat. Back row of seats may be 16". Seat spacing shall have 27" to 29" of hip-to-knee room.

All passenger seats shall be Freedman Featherlite double mid-back seats or equal with aisle-side arm type fold-up arm rests and aisle grab handles. Seat material shall be premium transit grade vinyl upholstery.

Adjustable, fully retractable 60" adult size seat belts shall be provided for each passenger seat. Vendor will provide four (4) seat belt extensions/extenders per vehicle for use by over-sized passengers. These will be stored in a separate and permanently mounted storage bag located in the driver's area of the vehicle. All seats shall be installed with 5 nuts and bolts.

Interior Body:

Paneling: Interior panels shall be of vinyl-clad aluminum, 060 Acrylonitrile butadiene styrene plastic, FRP (Fiberglass Reinforced Plastic), or melamine. A metal school bus type interior is not acceptable. Panels shall be installed such that no warping of interior materials occurs. Interior panels shall be smooth surface to allow easy cleaning. Pebbled surfaces are not acceptable. Panels shall be bonded, riveted, or welded in place. If rivets are used, they shall be well concealed. No visible fasteners in side walls will be accepted. Interior panels shall be supported and fastened so as to prevent buckles, drumming, or flexing while the vehicle is in service. Fasteners shall be of a type that will not loosen under vibration and corrosion resistant.

Interior panels, material and treatments shall be flame retardant meeting FMVSS #302 and treated to be easily cleaned. Colors are to be off-white or a light gray.

Body side/floor joints shall be covered with cove molding flashed up to side walls, and any exposed areas, i.e., gas tank, wheel well covers, etc., shall be covered with color harmonized ABS plastic or fiberglass.

Driver Compartment: All controls, gauges, etc. must be ergonomically designed and within driver's reach. Any such controls etc. located above dash are not acceptable. A driver-side air bag is required. A smoked or clear Plexiglas panel is to be located behind the driver approximately 3″ from the ceiling.

A guardrail will be provided behind the operator, extending from the vertical stanchion to the left side of the coach extending 30" high and approximately 2" above the floor. Stanchion and panel will not impair driver's seat adjustment. The driver area shall include a 6" 3speed fan located such that it can be directed either at the driver or the windshield.

The fan shall also be located to be within reach of the driver and not interfere with the rearview mirror.

Grab Rails/Stanchions: All grab rails and stanchions shall be not less than 1¼" outside diameter stainless steel tubing. A heavy pre-molded, energy-absorbing padding shall be glued or otherwise bonded without screws to prevent twisting/ slipping to all grab rails with the exception of ceiling grab rails and stanchions. All grab rails and stanchions shall be padded with BenTech Seamless Series high textured safety tubing or approved equal. Fittings shall be stainless steel, cast aluminum or equal, corrosion resistant material with anti-rattle fittings.

An integral hard molded anti-vandal type padded horizontal grab rail shall be attached across the top of each seat with a minimum of 2" clearance between the grab rail and the seat top. Horizontal grab rails will not be provided on seats whose back is positioned in front of an emergency exit window or opening. Such grab rails are accepted (not required) for back row of seats.

Grab rails on both sides of passenger entrance will be positioned so passengers will not use door-opening device or door for support when boarding or de-boarding the vehicle.

A heavy duty modesty panel padded on sides will be provided to the left of the passenger entry door with a floor-to-ceiling stanchion provided at the aisle.

A horizontal hand rail should extend from the stanchion to the body side wall or to another vertical stanchion in close proximity to wall. All guard rails and stanchion mountings will have reinforcement plates welded to structure behind panels of sufficient strength to withstand passenger force. Final locations shall be provided by diagram/floor plan and/or pilot model inspection.

All sharp edges, protruding fasteners, brackets, etc., that can cause injury or damage to clothing must be eliminated. All stanchions and grab rails are to be attached to structural posts or cross members of the roof to insure maximum strength. Ceiling grab rails shall be standard and padded.

Safety Equipment: Warning buzzer (back up alarm) is to be a minimum 90 decibels when transmission is in reverse. Interior buzzer is to activate when door or emergency exit(s) is open.

When equipped with a lift, a master switch with light for lift shall be at driver's station. The light at driver's station is activated when lift door is open or lift is in operation (when equipped with a lift). Also, an alarm pad is required to notify driver if specific kick-out emergency window(s) are ajar.

Emergency Equipment: The manufacturer will furnish a safety kit with the vehicle that will include the following equipment: one five-pound fire extinguisher; one industrial unit first aid kit of sufficient size to treat the number of persons equal to the designed seating capacity of the vehicle including the driver, In addition, a blood borne pathogen kit must be included.

Also, four 10" chem-lites (2-hour minimum) with hand-held and magnetic tri-pods, and three safety triangle reflectors. The chem-lites and reflectors shall be stored in containers and all emergency equipment shall be mounted in a location easily accessible to the driver and not in passenger area. The final location of all safety and emergency equipment will be approved by ALDOT. Two (2) seat belt cutters

including mounting clips and attaching hardware shall be provided with each vehicle (shipped not installed)

Wiring/Electrical:

Wiring: All general-purpose wires shall be vinyl insulated to 200 degrees Fahrenheit, shall meet SAE standards, and shall be color coded and number coded at least every 18” and permanently labeled to identify their function. Battery cables shall be minimum 1/0 gauge with minimum of 0.075" wall plastic insulation. All wiring shall be of sufficient size to carry the required currents without excessive voltage drop. All wiring shall be run inside the body in a protected area. All wiring shall be in a loom and securely clipped for maximum protection. Clips shall be rubber or plastic coated to prevent cutting the wiring insulation. When routing wiring under vehicle all wiring shall be encased in a loom and attached to the sub-floor with rubber or plastic coated P-clamps every 12” and shall not be bundled with hoses. The harness shall run in straight lines as close to the chassis frame rails as possible. Any harness that goes over the rear suspension shall be encased in a conduit fixture securely fastened to the sub-floor rails. All multi-pin connectors with 12 or more circuits shall be environmentally sealed with metal connectors and a twist lock mechanism. All connectors with 3 to 12 circuits shall be environmentally sealed high impact plastic connectors with pull apart locking tabs. All connections containing one to two circuits shall be made with Posi-Lock connectors. **NO BUTT CONNECTORS WILL BE ALLOWED.** Vehicle shall contain professionally built harnesses using color and number coded high temperature wire. Entire harness system and mating electrical components shall be plug-connected with lock tab connectors; all terminals shall be machine crimped; all harnesses shall be covered in high temp conduit and all exterior under body/under hood connectors shall be Weather-Pak connectors. **Each vehicle shall contain a set of detailed system-by-system "as built" wiring schematics for easy troubleshooting.**

Wiring in body will be in a plastic loom from power source, the component, or fixture and will be adequately protected against interference by passengers and the environment. Paper and cotton braid wrap is not acceptable. Cable in engine compartment must be insulated to protect it from engine heat. Cables and wiring will be held in place with Rubber covered clamps. All cable and wiring diagrams shall be marked to show color codes used.

Electrical devices, switches and gauges will be located such that they will not create a fire hazard during normal operation or in case of failures. All electrical motors will be readily accessible for service, including directional lights, defroster fan and door buzzer. Circuit breakers shall be on a master electrical panel and be in a readily accessible location for removal and servicing. The bus body and accessory electrical equipment shall be served by circuits separate and distinct from the vehicle chassis circuits.

All wiring provided by the bus manufacturer shall be copper and conform to all SAE J1292 requirements.

All wiring devices, switches, etc. except circuit breakers shall be rated to carry at least 125% of the maximum ampere load for which the circuit is protected. There shall be a master electrical component panel located inside the bus in a compartment over the driver's door with access from inside the bus.

Circuit breakers shall be of the automatic or manual reset type and designed specifically for each circuit. The electrical switch panel shall be mounted within easy reach of the driver, and shall incorporate all switches including, but not limited to, the following: passenger compartment light switch, rear air conditioning switches, rear heater switches.

Back-lighted switches for night operation are preferred, however engraved, embossed, or etched are acceptable. The switch panel shall be slightly inclined toward the driver to facilitate ease of viewing and operation. Switch panel and/or switches, gauges, or controls located above the driver's head are not acceptable.

Dual heavy-duty 12-volt horns will be provided. Installation of horn will be such as to afford protection from wheel wash.

A battery disconnect switch shall be located in an easily accessible area.

A vehicle-specific (as built) wiring schematic must be provided with each vehicle

An automatic fast idle system shall be installed which will automatically increase engine RPM to approximately 1200 RPM. This fast idle shall engage when vehicle transmission is in park or neutral and the air conditioning is on and shall not come on when vehicle is in drive and service brake has been applied.

Instruments/Controls:

THE FOLLOWING INSTRUMENTS ARE REQUIRED:

a. Speedometer with odometer
b. Fuel gauge
c. Voltmeter gauge
d. Oil pressure gauge
e. Water temperature gauge
f. Cruise control
g. Master reset circuit breaker
h. OEM sun visor for driver's side, adjustable for windshield or side window.
i. Hazard flasher control
a9. Transmission shift control
aa. Parking brake valve as applicable
ab. Hour meter
ac. Hub-o-meter (wheel hub mounted odometer)

THE FOLLOWING CONTROLS, IN ADDITION TO NORMAL STEERING, BRAKING AND TRANSMISSION FUNCTIONS, ARE TO BE PROVIDED:

a. Engine start switch (key type)
b. Panel illumination lamp (back lighted)
c. Interior and Exterior light switches
d. Directional signal switch
e. Driver's dome lamp switch
f. Hazard flasher switch
g. Windshield wiper washer control switches (2-speed plus integral intermittent)

h. Defroster switch
i. Front and rear heater switches
a9. Front and rear air conditioning switches
aa. Entry door control, equipped with manual override for electric door
ab. Master wheelchair lift switch (if applicable)
ac. OEM AM/FM stereo radio/ Compact Disc player
ad. Horn button

All instruments and controls are to be logically grouped on a single central panel to the front of the driver and a single control panel to the right of the driver. All instruments shall be in full view of the driver with no instruments obstructed by controls, trim panels or other appurtenances and arranged in consistent and uniform manner. Any such controls mounted above the dash is not acceptable, however a pod mounted to top of dash may be acceptable.

Air Conditioning: **The bidder shall offer both "Trans Air or ACC Climate Control (or an approve equal)" rear air conditioning system**. A complete air-conditioning system shall be of a size capable of providing adequate cooling and dehumidifying capacity for driver and passenger comfort. **The air conditioning system must be capable of maintaining 72 degrees F. temperature with a full load of adult passengers, with an ambient outside temperature of 95 degrees F. and relative humidity of 60% throughout the entire bus (certified verification is required from a Professional Engineer or from a certified testing facility) (ALDOT reserves the sole right to determine if the verification is accurate and appropriate and to request copies of the actual testing documentation).** There will be a free blow system to evenly distribute cool air for passengers and operator comfort. It shall be easy to operate for control and will be easily accessible to the driver with a four (4) position switch and digital control thermostat. Bidder shall furnish complete details of the air conditioning system proposed for this vehicle, including warranty and service provisions and air conditioning service vendors and warranty locations in the State of Alabama with the bid.

The air conditioning system shall have a minimum of 116,000 BTUs/Hr. output not including the OEM dash, tie ins to the OEM system are not allowed. Mud flaps shall be mounted both front and rear of condensers.

The system shall have one or more heavy-duty skirt mounted condensers with fans and motors enclosed within condenser housing. Two fans with 14" blades may be used. Condensers shall be mounted flush with, and not hang below the body skirt.

Housing shall be 16-ga. gal annealed steel with powder coated flat black textured paint or E-cote epoxy coating for superior durability and resistance to corrosion. Condensers shall have a combined 154,000 BTUs/Hr. 95 degree Fahrenheit ambient rating. Condenser motors to be enclosed within housing shall each have a minimum of four (4) brushes. The coil shall be copper tube, expanded into aluminum fins. Air shall be pulled through the coil and distributed toward the center of the vehicle at an approximate70 degree angle to prevent warming of vehicle floor. Integral high/low pressure cutouts to be wired into clutch circuit. The high-pressure switch shall be the resettable type and located on the condenser at an easily accessible location.

Fourteen (14) inch low profile axial fans dynamically balanced with a 4-pole permanent magnet totally enclosed motor shall be utilized. Electrical connections

are to be corrosion resistant brass. Condenser fitting connections shall be O-ring type. The filter dryer will be incorporated into an accumulator assembly and will be mounted for ease of service. The accumulator will also include an oil pick-up tube to insure proper oil return to the compressors.

Driver area evaporator shall be 30,000 BTU/Hr, and separately controlled from the passenger area air conditioning system. It shall include off/low/medium/high fan speeds.

The in-dash or driver's unit shall not interfere with removal or replacement of engine cover or blocked by door control mechanism. The passenger area air conditioning system shall be controlled easily from driver position. Controls shall include off/on and three (3) speed blower switch and a digital thermostat switch or utilize a digital key pad thermostat adjustment.

The rear system must have dual compressors and a rheostat control. Components of the air conditioning system shall be readily accessible for maintenance.

The rear air conditioning unit will be mounted in such a fashion that all mounting hardware will attach to the bus body frame or other structural component. In no instance will any air conditioning component be mounted in such a fashion as to rely on attachment to a nonstructural component of the vehicle.

Refrigerant hoses shall be refrigerant type, double-braided construction, Goodyear or equal with essentially comparable standards of quality design and performance. All A/C hoses for rear system shall be routed inside the vehicle. Refrigerant fittings shall be ATC0 or approved equal. Fittings and hoses must be qualified to SAE Specification J2064. The use of Aeroquip E-Z Clip system is approved. All refrigerant hoses must be mounted with sufficient “flex” and slack (approximately 3%) so that vehicle vibrations and flexing will not place excessive strain on these hoses and fittings and cause premature failure.

All wiring must be color coded and must meet all specifications required. Any subcontractor who provides air conditioning and/or heating components must meet all specifications unless specific exceptions are granted. Bidder must certify that wiring for A/C circuits is adequate to withstand the transient loads expected. Circuits shall be protected with automatic circuit breakers or thermal relays. It is preferred that all switching be ground activated, eliminating heavy power loads in the driver area. A/C warranty shall be two years minimum with unlimited mileage.

Heating/Defrosting: The heating and defrosting system will consist of at least two (2) additional 35,000 BTU/Hr. units, one rear unit and one unit located in midship of passenger area to uniformly heat the bus. The system shall be sufficient to maintain sixty-five (65) degrees Fahrenheit temperature throughout the vehicle while the bus is in operation with an outside air temperature of zero (0) degrees Fahrenheit.
The system shall incorporate an easily accessible water cut-off valve installed underneath bus at the driver door to allow water flow to rear heater to be shut off in summer.

The front unit will have one large heater core and two heavy duty blowers to provide sufficient heated air for defrosting the windshield and for bus heat.

The blower motors will be controlled by four (4) position switches on the driver's control panel off/low/medium/high, and be individually controlled from the instrument panel and within easy reach of the driver.

An additional outlet will be provided near the driver to allow heated air to the driver's area. A lever or knob will control the distribution of heated air between the defroster plenum chamber and the bus heating outlet. The control shall be located within easy reach of the driver position. The rear passenger area heater unit(s) shall be located under seats and shall not be exposed to passenger traffic. Combustion type heaters will not be permitted. The manufacturer will add required amount of permanent all-weather coolant after heaters have been connected to protect the cooling system to -25 degrees Fahrenheit tested at normal engine temperature.

All heater and air conditioning lines and hoses to be sufficiently protected and I insulated to insure against wear from friction and the elements.

All heater water lines and heater cores shall be of heavy-duty copper except where shock absorbing or flex lines are required. All core assembly joints shall be soldered. Heater control valves shall be readily accessible and the heating system circulating pump shall be located in the engine compartment.

All blowers required for the heating and ventilating systems shall be balanced statically and dynamically.

Body-Exterior: Vehicle body shall be metal. Steel or aluminum skin over fiberglass is unacceptable. FRP single roof and rear panels are acceptable.

Exterior panels are to be bonded to the body as detailed in the Sidewall Section (see sidewall). Pop rivets or sheet metal screws are not acceptable for fastening the vehicle exterior panels.

The exterior sidewall of the bus shall be smooth. There shall be no exposed fasteners on the exterior of the bus body.

The sidewall and roof shall be joined at the roof gutter above or slightly below the windows. All panels shall be installed so that they will shed water; that is, the leading panel shall be lapped over the following panel and in no case shall the sealing of the panels be dependent on caulking alone.

Any bright metal exterior trim shall be stainless steel, polished aluminum, or chrome plated. Also, water channeling rain gutters shall be installed over all door and window openings.

Undercoating: The entire body frame understructure of the vehicle including skirts, shall be fully undercoated with non-flammable, resin-type materials. (Polyolieum, Ziebart, Quaker State Soundoff, Ashland Tectyl 165G, Kendall Seal n Sound or approved equal) applied at time of manufacture. Automotive quality undercoating is not acceptable.

Note: Bidder is to provide two tubes of caulk for re-caulking seams after the first 1,000 miles.

Mirrors: Fully adjustable outside rear view mirrors are to be B&R Model 715 "A" PILLAR or approved equal driver and passenger side shall be mounted on

appropriate sides of vehicle. Fully adjustable crossover type mirror shall be at right front body corner.

Each mirror shall be 6” by 9” minimum (outside measurement) in size, and will be constructed with an anodized aluminum chrome plated frame and bracket designed to be retractable to prevent damage by bus washer equipment. A convex mirror shall be mounted above both exterior side mirrors if not OEM. Stick-on type mirrors are not acceptable. Exterior side mirrors are to be heated and remote controlled from the driver’s seat.

A 6” x 16” rectangular inside rear mirror will be installed for the driver's view of the bus interior. An internal rear view mirror of at least 6” in diameter will be mounted at the right front of the bus at the windshield headliner. All mirror mountings are to be sufficiently rigid to prevent distortion from vibration.

Color: Manufacturer's standard bright white exterior. Striping is also required and is to run the approximate length of the vehicle on both sides and be 8” in width. Striping is to be 1” below passenger window. Striping will be blue, orange, green or burgundy. Stripe color will be noted at time of order.

All colors will be approved by ALDOT prior to award of bid.

Windshield Wipers: Two heavy-duty, self-parking, electrically operated, with integral intermittent pulse windshield wipers will be furnished. Windshield washers with a minimum one (1) gallon reservoir will be provided. The system will be located for easy inspection, maintenance, filling and removal.

Additional Requirements:

Documentation required with each vehicle delivered:

a. Certificate of origin (chassis and body)
b. Bill of Sale
c. Check for application for title ($18/vehicle to end user)
d. Warranty papers
e. Spare key(s)
f. Operator's manual for bus and accessories including manufacturers suggested service schedule/checklist.
g. All required certifications (notarized): ADA, Horsepower, Air Pollution, Vehicle Service, FMVSS, ICC, Alabama State. Law, Working and Moving parts, Service and Adjustment, Repairs, Specification Compliance, Quality Controls, Vehicle Delivery, Post Delivery Buy America Certification.
h. Vendor customer service guide including service and repair locations.
i. All quality control problems, issues, concerns, etc. have been noted by in-plant inspections and appropriately corrected.
a9. Electrical wiring schematic for all components of vehicle "as built".
aa. Vendor Pre-delivery inspection (PDI) Checklist.
ab. Parts manuals for bus and accessories.
ac. Tire balancing and alignment verification.

Training: Manufacturer will provide eight (8) hours of training that will be given to two (2) representatives of the agency whom the vehicle is purchased for, at the successful bidder's expense. The training will consist of four (4) hours covering general operation of the vehicle and four (4) hours covering vehicle safety

and maintenance. All training will be determined by the Alabama Department of Transportation, 1409 Coliseum Boulevard, Montgomery, Alabama, 36110.

Workmanship: Workmanship throughout the vehicle will conform to the highest standard of commercially accepted practice for class of work and shall result in a neat and finished appearance. The design of the body and equipment which the manufacturer proposes to furnish must be such as to provide a vehicle of substantial and durable construction in all respects. An emphasis must be placed on passenger comfort and safety.

All welding operations, welding procedures, welding materials, and qualifications of operators will be in accordance with standards of the American Society of Testing Materials and the American Welding Society. All welds visible to the public will be ground smooth after the welding to present a smooth, workmanlike appearance. Where metal is welded to metal, the contact surface will be free of scale, grease, and paint. All exposed surfaces and edges will be smooth, free from burrs and other projections and will be neatly finished.

All parts will be new and in no case, will used, reconditioned or obsolete parts be accepted. Manufacturer will submit with his bid a detailed description and specifications of the frame structure, roof structure, and side sheeting, with particular reference to materials used. Any one part of whatever materials used in the construction will be an exact duplicate in manufacture and design and construction on each of the buses in the contract. Material changes due to changes in model year changes are accepted provided such changes are submitted to ALDOT upon contract renewal.

Tests/Testing: The complete vehicle and all working and moving parts and operating devices will be thoroughly tested and put in operating condition by the manufacturer. Any dealer identification, advertising, or similar material will not be attached to the vehicle. Prior to acceptance of vehicle, the manufacturer will service and adjust vehicle for operation to include, as a minimum, the following:

a. Focusing of lights
b. Tuning of engine
c. Adjustment of accessories
d. Checking of electrical, braking and suspension system
e. Charging of battery
f. Inflation of tires
g. Balancing of all wheels, including spare and front end alignment
h. Complete lubrication of engine, chassis and operating mechanisms with recommended grades of lubricants for the ambient temperature at the point of delivery
i. Servicing of cooling system with permanent type anti-freeze and summer coolant for minus 25 degrees Fahrenheit
a9. Servicing windshield washer with water and appropriate additives
aa. Full tank of fuel

Warranties: The manufacturer will state the terms and conditions of the vehicle warranty. In no case will the warranty be less than the following:

a. Bumper to Bumper: 12 months or 12,000 miles
b. Chassis Manufacturer: 3 Years or 36,000 Miles

c. Rear Air Conditioning Unit: 2 Years/Unlimited Miles
d. Body Structural: 5 Years or 100,000 Miles
e. Lamination (leaking): 3 Years or 100,000 Miles

The bidder will state where warranty maintenance work may be obtained in Alabama. ALDOT reserves the right to visit, inspect, and approve such facility before final award.

Any and all materials, specialties, equipment or accessories that prove defective in normal operation within the above period will be replaced or repaired by the manufacturer free of any and all cost to the vehicle operator, including material and labor. Warranty replacement and/or repairs will be facilitated promptly by the awarded vendor. The bidder will provide written assurance with the bid package regarding warranty repairs.

All body parts shall be shipped in 10 calendar days or less. Other parts are to be shipped in 3 calendar days or an up-to-date status report is provided.

Delivery Schedule: The vehicle(s) shall be delivered not more than 120 days after issue date of the Purchase Order. ALDOT shall be notified immediately if there is a chassis-related problem affecting delivery. Notice of delivery shall be given not less than 24 hours prior to delivery.

Post Delivery Survey: The successful vendor shall conduct a survey of end users upon completion of the contract (delivery and acceptance of last vehicle ordered). The survey shall include (but not be limited to) product satisfaction, problems, etc. Also to be included in the survey is the contact person for the end user who has responsibility for the Preventive Maintenance Program (PMP). The PMP shall include vehicle chassis, body, air conditioning unit(s), and wheelchair lift, where applicable. In addition, the survey shall include the vendor contact person for warranty questions/issues. The end user shall also provide the vendor with a warranty responsibility contact. The survey shall be completed not less than ninety (90) days after delivery to ALDOT. The vendor shall compile survey results and supply a copy to ALDOT.

Vehicle title Or Certificate of Origin: To be assigned as follows:
These items will be provided as "built for individual unit".

Vehicle title Or Certificate of Origin: To be assigned as follows:

a. The receiving project name and address

b. First Lienholder listed as

Alabama Dept. of Transportation
1409 Coliseum Boulevard
Montgomery, AL 36110

c. Mailed to:

Alabama Dept. of Transportation
Local Transportation Bureau
1409 Coliseum Boulevard
Montgomery, AL 36110

HANDICAPPED ACCESSIBILITY PACKAGES

According to the Americans with Disabilities Act (ADA), certain features are required to make a vehicle accessible to persons with disabilities. Those items required to make a vehicle ADA accessible are included in the various packages.

NOTE: All accessibility packages will be oversized. The oversized or O/S package includes:

a. A lift capacity of 1,000 lbs. minimum. BRAUN Model Century Lift, #NCL 1000IB3451HB-2 (34"x 51") or approved equal

b. A third track to accommodate longer wheelchairs

c. One additional 3-step foldaway type flip seat adjacent to third track may replace a row of standard bench seats

d. F2 denotes double bench flip seat (on diagram)

e. F3 denotes double 3-step foldaway flip seat (on diagram)

ADA Package (ADA -O/S 2B)

Required for urban fixed-route services, ADA Package includes:

a. Wheelchair Lift: Fully automatic, curbside. Mount between rear wheel and rear of vehicle.

b. Two forward-facing securement stations. Price to include credit for removal of standard seats.

c. One double flip bench seat. Flip seats shall be a deluxe model contoured to coordinate with standard seats and shall have aisle-side arm rests and seat belts.

d. One double 3-step foldaway flip seat

e. Wheelchair belt restraint storage: Such compartment shall be located to be easily accessible, yet not interfere with passenger traffic.

f. Priority seating signs:

I. Each vehicle shall contain sign(s) which indicate that seats in the front of the vehicle are priority seats for persons with disabilities, and that other passengers should make such seats available to those who wish to use them. At least one set of forward-facing seats shall be so designated.

II. Each securement station shall have a sign designating it as such.

III. Characters on signs required by paragraphs 1 and 2 above shall have a width-to-height ratio between 3:5 and 1:1 and a stroke

width-to-height ratio between 1:5 and 1:10 with a minimum character height (using an upper case "X" of 5/8 inch with "wide" upper case letters) and shall contrast with the background either light-on-dark or dark-on-light.

g. Fare box: A transit type fare box shall be Diamond RV with 2 vaults or equal and be mounted with trip handle located on driver's side. It shall be mounted on a stanchion, braced, and easily accessible to boarding passengers. An amber or indirect fare box light shall be connected to dash instrument light. Two interchangeable lockable fare box vaults, keyed alike, with a double set of keys for each lock shall be supplied. Vault and fare box exteriors shall be marked with key reference: A padded grab rail shall be placed to assist passengers and to prevent them from falling onto the fare box and other forward areas. The bidder shall provide a description of the fare box with the bid package.

h. Destination signs: Front and boarding side signs will be digital Hanover, Trans Sign LED Model or approved equal. Adequate illumination for daytime or nighttime visibility with a minimum of 25 destination positions. Sign characters shall have a width- to-height ratio between 3:5 and 1:1, and stroke to width-to-height ratio between 1:5 and 1:10, with a minimum character height of 2 inches for front head signs. Spacing shall be not less than 1/16 the height of upper case letters, and shall contrast with backgrounds, either dark-on light or light-on-dark. Destination signs submitted with bid must be ADA compliant.

i. Public address system: Mobile page with one exterior and four interior speakers.

a9. Stop request signal: A pull-cord, touch tape, or other stop request system shall be installed on both sides of the interior, to include and be adjacent to, any wheelchair securement station. The signal cords etc. will be located so they may be easily reached by passengers while not interfering with emergency exits. Such a system shall provide both auditory and visual indications that a stop request has been made. The auditory signal shall be a buzzer type, audible as long as cord is pulled. A singular, non-repetitive tone is not acceptable. Controls required by this section shall be mounted no higher than 48 inches and not lower than 15 inches above the floor, shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no greater than 5lbs. (22.2N)

Handicapped Accessibility Package (H.A.P.-OS/2B)

Suggested for Demand/Response systems: (See specifications as stated above)

a. Wheelchair Lift
b. Two forward-facing securement stations
c. One double flip bench flip seat. Flip seats shall be a deluxe model contoured to coordinate with standard seats and shall have aisle-side arm rests and seat belts
d. One double 3-step foldaway flip seat
e. Wheelchair belt restraint storage
f. Priority seating signs
g. Wheelchair belt restraint storage
h. Priority seating signs

Handicapped Accessibility Package (H.A.P.-OS/4B)

Suggested for Demand/Response systems: (See specifications as stated above.)

a. Wheelchair Lift
b. Four, forward-facing securement stations
c. One double flip bench flip seat
d. Up to 5 double 3-step foldaway flip forward facing seats

e. Wheelchair belt restraint storage
f. Priority seating signs
g. Wheelchair belt restraint storage

Handicapped Accessibility Package (H.A.P.-OS/SP)

This package requires as many securement stations meeting ADA regulations as appropriate for size of vehicle. (See specifications as stated above.)

a. Wheelchair Lift
b. 8 forward-facing securement stations
c. Up to 10 double 3-step foldaway flip forward facing seats
d. Wheelchair belt restraint storage
e. Priority seating signs
f. Wheelchair belt restraint storage

Note: This H.A.P. Special Package requires **no wheel wells** protruding above the floor. The bus will have a paratransit flat floor from side to side and from driver seat to back wall. A 6" riser shall be located immediately behind driver seat to the flat floor. The riser shall have a white step nosing per specifications for entry steps. The flat floor shall be constructed of 14 ga. steel welded longitudinally on 12" centers from front to back on top of the standard O.E.M. floor. The beams shall be covered with 1" thick minimum marine grade plywood, sealed on edges and bottom. Flooring material will be transit grade quality rubber flooring. Floor color is to be black.

SPECIFICATIONS of HANDICAPPED ACCESSIBILITY PACKAGES

All Handicapped Accessibility Packages (HAP) must have the following features:

1. All wheelchair tie down tracks shall be reinforced below the floor by a minimum of 3 ½" x 1", 12 ga. steel "C" channel or flat steel 11 ga., welded to the steel sub floor.
2. All foldaway seats shall have reinforcing steel equivalent to 3 ½" x 1", 12 ga. steel "C" channel welded to the steel sub floor below the seating position to strengthen the mounting points for these seats. In addition, the seats and seat belts must meet the requirements of FMVSS 207 and 210. Evidence that the seats were tested in the bus being bid must be submitted with the bid. All testing must be done in the bus; laboratory or bench testing is not sufficient as the bus sub floor is an essential part of the seating system.
1. Additional springs shall be installed on the rear leaf spring packs of lift equipped vehicles with a GVWR less than 15,000 lbs to offset the weight of the lift when it is deployed. This requirement will not apply to vehicles over 15,000 lbs as the rear springs on these vehicles are sufficient to handle the weight of the deployed lift without the addition of extra springs.

NOTE: Bidder must include Professional Engineering (PE) stamped drawings of the vehicle floor showing extra steel to support the wheelchair securement area and third track as well as extra suspension for those vehicles to be ordered with accessibility packages as applicable to the specifications listed above. ATTACHMENT W.

AVAILABLE ACCESSORIES

The following equipment, when specified will be furnished. A separate price list will be provided for all accessory equipment. Such accessory items will be a part of the bid specifications.

NOTE: Bidder is responsible for furnishing required equipment to enable the vehicle to meet or exceed the specified GVWR when accessory equipment is requested

The award of the contract will be based on the base price of the vehicle plus options/accessories and the lowest responsible bid and considerations as listed in the terms/conditions of bid.

Also, bidder must include with the bid, floor plans for each accessibility package for each size vehicle.

The bidder shall offer Trans Air, ACC Climate Control or approved equal rear air conditioning systems as long as air conditioning requirements are met.

All lift, securement and air conditioning choices shall be made by the end user at the time of order as long as requirements are met.

HANDICAPPED ACCESSIBILITY PACKAGES (HAP)

According to the Americans with Disabilities Act (ADA), certain features are required to make a vehicle accessible to persons with disabilities. Those items required to make a vehicle ADA accessible are included in the various packages.

Wheelchair Lifts:

a. BRAUN Model Lift, #NCL 1000IB3451HB-2 (34"x 51") or approved equal

b.

Securement packages (includes shoulder and lap belt):

a. Sur-Lok # Titan 800

b. Q-Straint # QRT-360

c. or approved equal

ADDITIONAL OPTIONS

Donation Box: 16 ga. metal 8” H x 4” W x 6” D, locking with 2 keys to include, padded stanchion attachment. Diamond #DM1 or approved equal.

Advertising Package:

a. Exterior Advertising Brackets-vendor to include options for number and location of brackets with the bid. Brackets shall include three permanent sides and one detachable side. The brackets shall be mounted from immediately below the stripe and be the largest appropriate size.*2/SIDE,1/REAR Specify size of brackets per vehicle.

b. Interior Advertising Brackets (one row both sides of bus at wall/ceiling joint)*Specify size of brackets per vehicle.

Wiring Kit for 2-way Radios

Sonar Type Back-up Alarm: *Note: the sonar alarm will be mounted in addition to the standard back-up alarm. (Hindsight #300 or approved equal-Addition to Standard)

Vehicle Lettering: (Sections 5311-5307)

a. All lettering must be 6", capital letters, and centered. The lettering will be a permanent adhesive vinyl applied in a professional manner by the dealer.
b. "Public Transportation" on front/rear end caps.
c. Grantee name and telephone number on both sides of the bus.

Vehicle Lettering: (Section 5310)

a. All lettering must be 6", capital letters, and centered. The lettering will be a permanent adhesive vinyl applied in a professional manner by the dealer.
b. Grantee name and telephone number on both sides of the bus

Exterior Graphic Design: Exterior graphic design shall consist of either a painted or vinyl overlay installation or combination of both projecting a trolley like appearance (includes colored side panels, striping & scrolls). Vinyl shall be applied by a professional installer with the theme and content of the total vinyl work modeled in the trolley motif and when completed, the exterior vinyl shall give the bus a trolley like appearance. Bid must include a complete drawing of the vinyl design and all relative information on the application process. No part of the design shall infringe on the copyrights of any other vinyl wrap designer/installer. Color: Blue, Green, Burgundy, Dark Red.

Integrated Child/Companion Seat

Surveillance System:

a. Color
b. Digital Video Recorder-shall be lockable and tamper proof
c. Minimum 20 frames/second
d. 720 x 486 pixels NTSC or equal
e. Three (3) color cameras minimum, 8mm, split screen,
f. Lux. of 0.1 Or better with infrared LED
g. Housing unit with security lock
h. 24 hr record time
i. Day, Date, Time imprints
a9. Built-in microphone
aa. Operation-auto-on at ignition
ab. Auto-off at ignition kill or 30 inches after
ac. No external flashing light
ad. Hard Drive-30G min with back-up and hot swappable
ae. Power-12V DC Source
af. 16g wire min
ag. Internal surge protection
ah. Ability to download images to PC
ai. Ability to print mail images
b9. Programmable timers
ba. 8 mm split screen